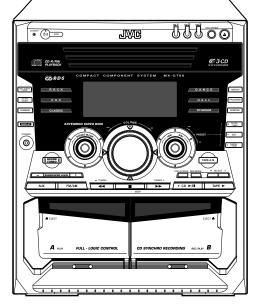
JVC



COMPACT COMPONENT SYSTEM

CA-MXGT88 CA-MXGA77

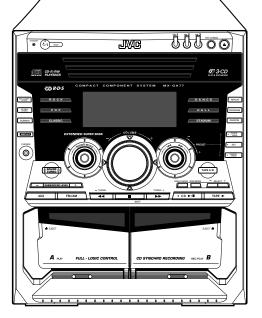
CA-MXGT88







CA-MXGA77







INSTRUCTIONS

For Customer Use:

Enter below the Model No. and Serial No. which are located either on the rear, bottom or side of the cabinet. Retain this information for future reference.

Model No.

Serial No.

Warnings, Cautions and Others

IMPORTANT for the U.K.

DO NOT cut off the mains plug from this equipment. If the plug fitted is not suitable for the power points in your home or the cable is too short to reach a power point, then obtain an appropriate safety approved extension lead or consult your dealer.

BE SURE to replace the fuse only with an identical approved type, as originally fitted.

If nonetheless the mains plug is cut off ensure to remove the fuse and dispose of the plug immediately, to avoid a possible shock hazard by inadvertent connection to the mains supply.

If this product is not supplied fitted with a mains plug then follow the instructions given below:

IMPORTANT:

DO NOT make any connection to the terminal which is marked with the letter E or by the safety earth symbol or coloured green or green-and-yellow.

The wires in the mains lead on this product are coloured in accordance with the following code:

Blue: Neutral Brown: Live

As these colours may not correspond with the coloured markings identifying the terminals in your plug proceed as follows:

The wire which is coloured blue must be connected to the terminal which is marked with the letter N or coloured black.

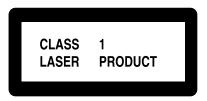
The wire which is coloured brown must be connected to the terminal which is marked with the letter L or coloured red.

IF IN DOUBT - CONSULT A COMPETENT ELECTRICIAN.

IMPORTANT FOR LASER PRODUCTS

REPRODUCTION OF LABELS

① CLASSIFICATION LABEL, PLACED ON EXTERIOR SURFACE



② WARNING LABEL, PLACED INSIDE THE UNIT

CAUTION: Invisible laser radiation when open and interlock failed or defeated. AVOID DIRECT EXPOSURE TO BEAM. (e) /ARNING: Osynlig lasersträlning när denna del är
sppnad och spärren är
urkopplad. Betrakta ej
strälen. (s)

ADVARSEL: Usynlig laserstråling ved åbning, når sikkerhedsafbrydere er ude af funktion. Undgå udsættelse for stråling (d) VARO: Avattaessa ja suojalukitus ohitettaessa olet alttiina näkymättömälle lasersäteilylle. Älä katso säteeseen. (f)

- 1. CLASS 1 LASER PRODUCT
- CAUTION: Invisible laser radiation when open and interlock failed or defeated. Avoid direct exposure to beam.
- CAUTION: Do not open the top cover. There are no user serviceable parts inside the Unit; leave all servicing to qualified service personnel.

Caution — 0/l switch!

Disconnect the mains plug to shut the power off completely. The Ω/I switch in any position does not disconnect the mains line. The power can be remote controlled.

CAUTION

To reduce the risk of electrical shocks, fire, etc.:

- 1. Do not remove screws, covers or cabinet.
- 2. Do not expose this appliance to rain or moisture.

CAUTION

- Do not block the ventilation openings or holes.
 (If the ventilation openings or holes are blocked by a newspaper or cloth, etc., the heat may not be able to get out.)
- Do not place any naked flame sources, such as lighted candles, on the apparatus.
- When discarding batteries, environmental problems must be considered and local rules or laws governing the disposal of these batteries must be followed strictly.
- Do not expose this apparatus to rain, moisture, dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on the apparatus.

Caution: Proper Ventilation

To avoid risk of electric shock and fire, and to prevent damage, locate the apparatus as follows:

1 Front:

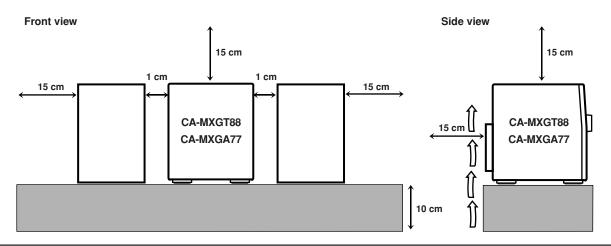
No obstructions and open spacing.

2 Sides/ Top/ Back:

No obstructions should be placed in the areas shown by the dimensions below.

3 Bottom:

Place on the level surface. Maintain an adequate air path for ventilation by placing on a stand with a height of 10 cm or more.



SAFETY INSTRUCTIONS "SOME DOS AND DON'TS ON THE SAFE USE OF EQUIPMENT"

This equipment has been designed and manufactured to meet international safety standards but, like any electrical equipment, care must be taken if you are to obtain the best results and safety is to be assured.

Do read the operating instructions before you attempt to use the equipment.

Do ensure that all electrical connections (including the mains plug, extension leads and interconnections between pieces of equipment) are properly made and in accordance with the manufacturer's instructions. Switch off and withdraw the mains plug when making or changing connections.

Do consult your dealer if you are ever in doubt about the installation, operation or safety of your equipment.

Do be careful with glass panels or doors on equipment.

DON'T continue to operate the equipment if you are in any doubt about it working normally, or if it is damaged in any way-switch off, withdraw the mains plug and consult your dealer.

DON'T remove any fixed cover as this may expose dangerous voltages.

DON'T leave equipment switched on when it is unattended unless it is specifically stated that it is designed for unattended operation or has a standby mode.

Switch off using the switch on the equipment and make sure that your family know how to do this.

Special arrangements may need to be made for infirm or handicapped people.

DON'T use equipment such as personal stereos or radios so that you are distracted from the requirements of traffic safety. It is illegal to watch television whilst driving.

DON'T listen to headphones at high volume as such use can permanently damage your hearing.

DON'T obstruct the ventilation of the equipment, for example with curtains or soft furnishings.

Overheating will cause damage and shorten the life of the equipment.

DON'T use makeshift stands and NEVER fix legs with wood screws — to ensure complete safety always fit the manufacturer's approved stand or legs with the fixings provided according to the instructions.

DON'T allow electrical equipment to be exposed to rain or moisture.

ABOVE ALL

- NEVER let anyone, especially children, push anything into holes, slots or any other opening in the case -this could result
 in a fatal electrical shock.;
- NEVER guess or take chances with electrical equipment of any kind
- it is better to be safe than sorry!

Introduction



We would like to thank you for purchasing one of our JVC products. Before operating this unit, read this manual carefully and thoroughly to obtain the best possible performance from your unit, and retain this manual for future reference.

About This Manual

This manual is organized as follows:

- The manual mainly explains operations using the buttons and controls on the unit. You can also use the buttons on the remote control if they have the same or similar names (or marks) as those on the unit.
 If operation using the remote control is different from that using the unit, it is then explained.
- Basic and common information that is the same for many functions is grouped in one place, and is not repeated in each procedure. For instance, we do not repeat the information about turning on/off the unit, setting the volume, changing the sound effects, and others, which are explained in the section "Common Operations" on pages 9 to 11.
- The following marks are used in this manual:



Gives you warnings and cautions to prevent damage or risk of fire/electric shock. Also gives you information which is not good for obtaining the best possible performance from the unit.



Gives you information and hints you had better know.

Precautions

Installation

- Do not grasp the control knobs when moving or carrying the unit.
- Install in a place which is level, dry and neither too hot nor too cold—between 5°C and 35°C.
- Install the unit in a location with adequate ventilation to prevent internal heat built-up in the unit.
- Leave sufficient distance between the unit and the TV.
- Keep the speakers away from the TV to avoid interference with TV.



DO NOT install the unit in a location near heat sources, or in a place subject to direct sunlight, excessive dust or vibration.

Power sources

• When unplugging from the wall outlet, always pull the plug, not the AC power cord.



DO NOT handle the AC power cord with wet hands

Moisture condensation

Moisture may condense on the lens inside the unit in the following cases:

- After starting heating in the room
- In a damp room
- If the unit is brought directly from a cold to a warm place Should this occur, the unit may malfunction. In this case, leave the unit turned on for a few hours until the moisture evaporates, unplug the AC power cord, and then plug it in again.

Others

- Should any metallic object or liquid fall into the unit, unplug the unit and consult your dealer before operating any further.
- If you are not going to operate the unit for an extended period of time, unplug the AC power cord from the wall outlet.



DO NOT disassemble the unit since there are no user serviceable parts inside.

If anything goes wrong, unplug the AC power cord and consult your dealer.

Contents

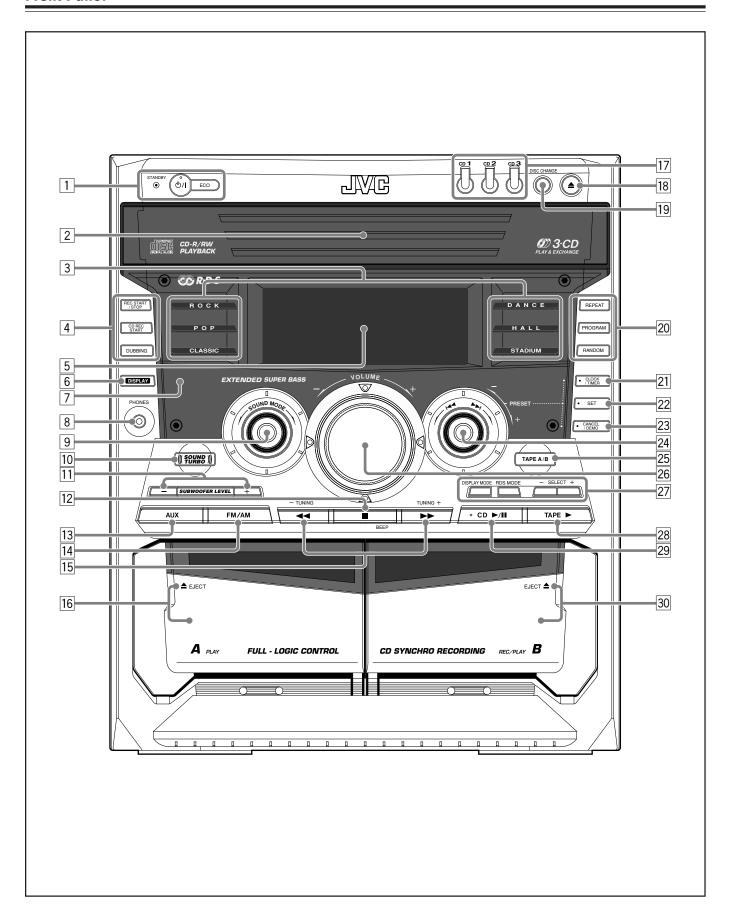


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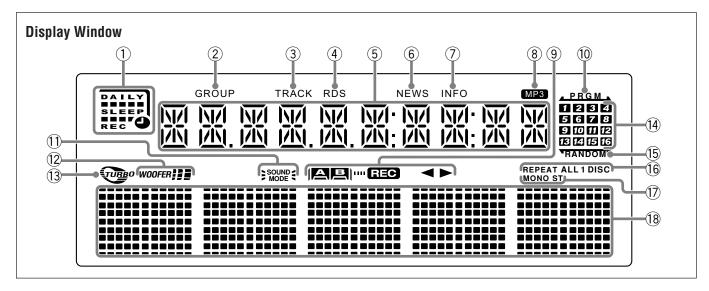
Location of the Buttons and Controls

Become familiar with the buttons and controls on your unit.

Front Panel







See pages in the parentheses for details.

Front Panel

- (standby/on) button and STANDBY lamp (9, 26, 27) ECO button (9)
- 2 Carrousel
- 3 Sound mode lamps (11)
- 4 REC START/STOP button (23) CD REC START button (24) DUBBING button (24)
- 5 Display window
- 6 DISPLAY button (9)
- 7 Remote sensor
- 8 PHONES jack (10)
- 9 SOUND MODE control (11)
- 10 SOUND TURBO button (10)
- 11 SUBWOOFER LEVEL +/– buttons (10)
- 13 AUX button (9)

Pressing this button also turns on the unit.

14 FM/AM button (9, 12)

Pressing this button also turns on the unit.

- 15 TUNING +/- buttons (12)
 - **◄◄/▶►** (fast rewind/fast forward) buttons (17, 22)
- 16 Deck A cassette holder (22, 24)

Pressing the \triangle EJECT *portion opens the holder.*

17 Disc number buttons and lamps (CD1, CD2, and CD3) (16, 17, 20, 21, 24)

Pressing one of these buttons also turns on the unit.

- 18 \triangle (Carrousel open/close) button (15 17, 19 21) *Pressing this button also turns on the unit.*
- 19 DISC CHANGE button (15, 17)
- PROGRAM (MP3 Resume on/off) button (19, 20) RANDOM button (21)
- [21] CLOCK/TIMER button (9, 25 28)
- 22 SET button (9, 12, 20, 25 28)
- 23 CANCEL/DEMO button (8, 9, 20, 25 28)

- PRESET +/- control (12)

 | $\triangleleft \triangleleft$ | (reverse search/forward search) control (9, 17 21, 25 27)
- 25 TAPE A/B button (22)
- 26 VOLUME control (10)
- 27 RDS operation buttons (13, 14)
 - DISPLAY MODE, RDS MODE, and SELECT +/– buttons
- TAPE ► (play) button (9, 22, 24)

 Pressing this button also turns on the unit.
- 29 CD ►/II (play/pause) button (9, 15 17, 20) *Pressing this button also turns on the unit.*
- 30 Deck B cassette holder (22 24, 27)

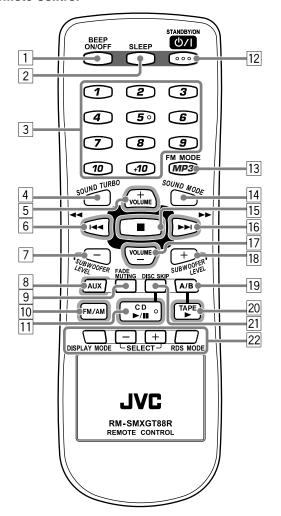
 Pressing the EJECT ≜ portion opens the holder.

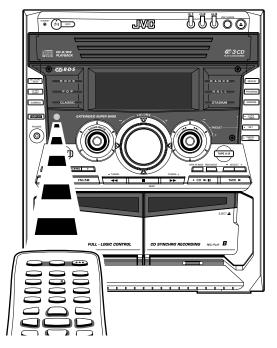
Display window

- 1 Timer indicators
 - DAILY (daily timer), SLEEP (sleep timer), REC (recording timer), and (timer) indicators
- ② GROUP indicator
- ③ TRACK indicator
- (4) RDS indicator
- (5) Main display
 - Shows the source name, frequency, etc.
- ⑥ NEWS indicator
- 7 INFO indicator
- (8) MP3 indicator
- 9 Tape operation indicators
 - A/B (operating deck), REC (recording), and ◀► (tape running) indicators
- 10 PRGM (program) indicator
- ① SOUND MODE indicator
- **12** WOOFER indicator
- (13) TURBO indicator
- (14) CD track number indicators
- (15) RANDOM indicator
- (6) REPEAT mode indicators
 - REPEAT, 1, 1 DISC, ALL DISC indicators
- 17 Tuner operation indicators
 - MONO and ST (stereo) indicators
- (B) Volume level, Subwoofer level and Sound Mode pattern indicators



Remote Control





When using the remote control, point it at the remote sensor on the front panel.

Remote Control

- 1 BEEP ON/OFF button (11)
- 2 SLEEP button (28)
- 3 Number buttons (12, 18)
- 4 SOUND TURBO button (10)
- 5 VOLUME + button (10)
- 6 $\blacktriangleleft \blacktriangleleft / \blacktriangleleft \blacktriangleleft$ (reverse search/fast rewind) button (12, 17 19, 21, 22)
- 7 SUBWOOFER LEVEL button (10)
- 8 AUX button (9)

Pressing this button also turns on the unit.

- 9 FADE MUTING button (10)
- 10 FM/AM button (9, 12)

Pressing this button also turns on the unit.

- [1] CD ►/II (play/pause) button (9, 15 17, 20) *Pressing this button also turns on the unit.*
- 12 **U/I** STANDBY/ON button (9)
- 13 FM MODE button (12) MP3 button (19)
- 14 SOUND MODE button (11)
- 15 \blacksquare (stop) button (15 17, 20 24)
- 16 $\blacktriangleright \blacktriangleright I/\blacktriangleright \blacktriangleright$ (forward search/fast forward) button (12, 17 19, 21, 22)
- 17 VOLUME button (10)
- 18 SUBWOOFER LEVEL + button (10)
- 19 A/B button (22)
- 20 TAPE ► (play) button (9, 22)

 Pressing this button also turns on the unit.
- 21 DISC SKIP button (15, 17)
- 22 RDS operation buttons (13, 14)
 - DISPLAY MODE, SELECT +/-, and RDS MODE buttons

Unpacking

After unpacking, check to be sure that you have all the following items.

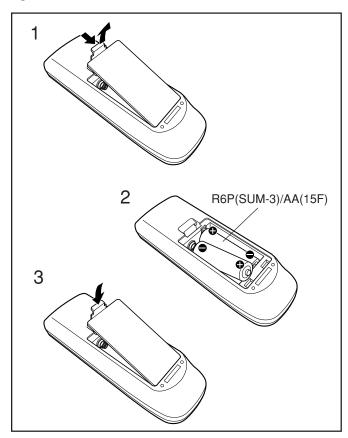
The number in the parentheses indicates the quantity of the pieces supplied.

- AM (MW) loop antenna (1)
- FM antenna (1)
- Remote control (1)
- Batteries (2)

If any is missing, consult your dealer immediately.

Putting the Batteries into the Remote Control

Insert the batteries—R6P(SUM-3)/AA(15F)—into the remote control, by matching the polarity (+ and -) on the batteries with the + and - markings on the battery compartment. When the remote control can no longer operate the unit, replace both batteries at the same time.

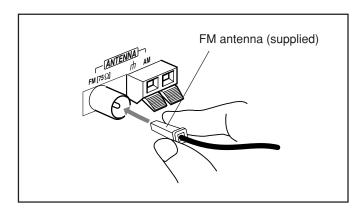




- DO NOT use an old battery together with a new one.
- DO NOT use different types of batteries together.
- DO NOT expose batteries to heat or flame.
- DO NOT leave the batteries in the battery compartment when you are not going to use the remote control for an extended period of time.
 Otherwise, it will be damaged from battery leakage.

Connecting Antennas

FM antenna



- **1** Attach the FM antenna to the FM [75 Ω] coaxial terminal.
- 2 Extend the FM antenna.
- **3** Fasten it up in the position which gives you the best reception, then fix it on the wall, etc.

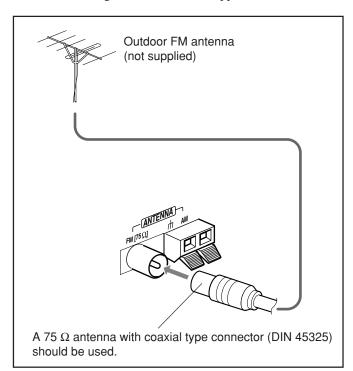


About the supplied FM antenna

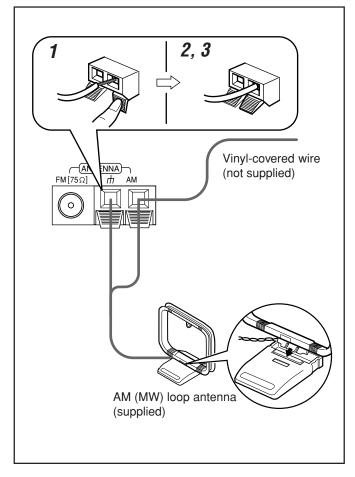
The FM antenna supplied with this unit can be used as temporary measure. If reception is poor, you can connect an outdoor FM antenna.

To connect an outdoor FM antenna

Before connecting it, disconnect the supplied FM antenna.



AM (MW) antenna



- 1 Press and hold the clamp of the AM terminal on the rear of the unit.
- 2 Insert the end of the AM (MW) loop antenna cord into the terminal.
 - If the AM (MW) loop antenna wire is covered with vinyl, remove the vinyl by twisting it as shown in the diagram.
- **3** Release the finger from the clamp.
- **4** Turn the AM (MW) loop antenna until you have the best reception.

To connect an outdoor AM (MW) antenna

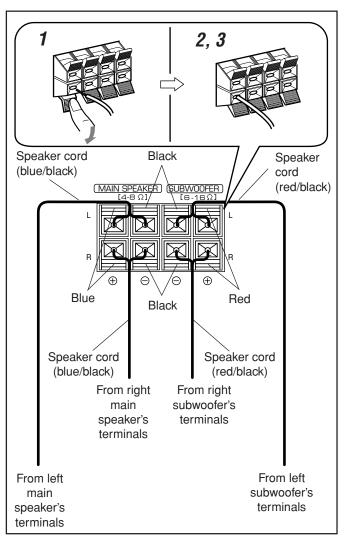
When reception is poor, connect a single vinyl-covered wire to the AM terminal and extend it horizontally. (The AM (MW) loop antenna must remain connected.)

notes

For better reception of both FM and AM (MW)

- Make sure the antenna conductors do not touch any other terminals and connecting cords.
- Keep the antennas away from metallic parts of the unit, connecting cords, and the AC power cord.

Connecting Speakers



- **1** Press and hold the clamp of the speaker terminal on the rear of the unit.
- **2** Insert the end of the speaker cord into the terminal.

Match the colors (polarity): Blue (+) to blue (+) and black (-) to black (-); red (+) to red (+) and black (-) to black (-).

 If the wire is covered with vinyl, remove the vinyl by twisting it as shown in the diagram.



3 Release the finger from the clamp.

IMPORTANT:

- Use only speakers with the same speaker impedance as indicated by the speaker terminals on the rear of the unit.
- DO NOT connect more than one speaker to one speaker terminal.



Connecting Other Equipment

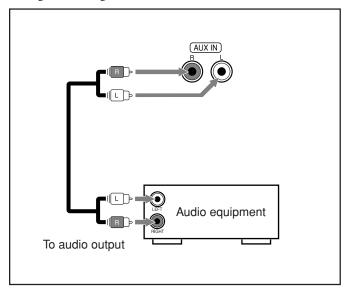
You can connect audio equipment—used only as a playback device.



- DO NOT connect any equipment while the power is on.
- DO NOT plug in any equipment until all connections are complete.

To connect audio equipment

Be sure that the plugs of the audio cords are color coded: White plugs and jacks are for left audio signals, and red ones for right audio signals.



For playing the other equipment through this unit, connect between the audio output jacks on the other equipment and AUX IN jacks by using audio cords (not supplied).

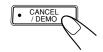
NOW you are ready to plug in the unit and other connected equipment.

Canceling the Display Demonstration

When connecting the AC power cord into a wall outlet, the unit automatically starts the display demonstration.

On the unit ONLY:

To cancel the display demonstration, press CANCEL/DEMO while the display demonstration is shown on the display.



notes

When you press other buttons

The display demonstration stops temporarily. It will start automatically again (if no operation is done for 2 minutes) until you cancel it.

To start the display demonstration manually

Press and hold CANCEL/DEMO again for more than 2 seconds.



Common Operations

Turning On or Off the Power

To turn on the unit, press **O/I** so that the STANDBY lamp goes off.



To turn off the unit (on standby), press 0/1 again so that the STANDBY lamp lights up.



A little power is always consumed even while the unit is on standby.

To switch off the power supply completely, unplug the AC power cord from the AC outlet.



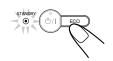
When you unplug the AC power cord or if a power failure occurs

The clock is reset to "--: -" soon, while the tuner preset stations (see page 12) will be erased in a few days.

Saving the Power Consumption While on Standby—ECO Mode

You can save the power consumption while the unit is turned off (on standby).

To activate the ECO mode, press ECO while the unit is turned off (on standby). The display illumination (including the display demonstration) disappears.



To deactivate the ECO mode, press ECO again.

The display illumination appears.

• Turning on the unit also deactivates the ECO mode.



About the ECO mode

While the ECO mode is activated, the display demonstration is canceled temporarily.

Setting the Clock

Before operating the unit any further, first set the clock built in this unit. You can set the clock whether the unit is on or off.

On the unit ONLY:

1 Press CLOCK/TIMER.



The hour digits start flashing on the display.

2 Turn the |**◄◄**/**▶▶**| control to adjust the hour, then press SET.

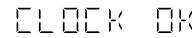




The minute digits start flashing on the display.

- If you want to correct the hour after pressing SET, press CANCEL/DEMO. The hour digits start flashing again.
- **3** Turn the | **◄ ♦** | **♦** | control to adjust the minute, then press SET.

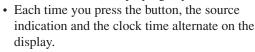






To check the clock time

Press DISPLAY while playing any source.





To adjust the clock again

If you have adjusted the clock before, you need to press CLOCK/TIMER repeatedly until "CLOCK" is selected.

• Each time you press the button, the clock/timer setting modes change as follows:



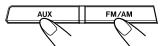


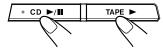
If there is a power failure

The clock loses the setting and is reset to "--:-." You need to set the clock again.

Selecting the Sources

To listen to the radio, press FM/AM. (See page 12.)
To play back CDs, press CD ►/II. (See pages 15 – 21.)
To play back tapes, press TAPE ►. (See page 22.)
To select the external equipment as the source, press AUX.





When you press the play button for a particular source (AUX, FM/AM, CD ▶/II, and TAPE ▶), the unit turns on (and the unit starts playing the source if it is ready—COMPU PLAY CONTROL).

\rightarrow

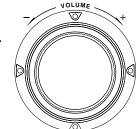
Adjusting the Volume

You can adjust the volume level only while the unit is turned on

This function only affects the playback sound, not your recording.

Turn the VOLUME control clockwise to increase the volume or counterclockwise to decrease it.

• The volume level can be adjusted in 32 steps (VOL MIN, VOL 1 — VOL 30, and VOL MAX).



When using the remote control, press VOLUME + to increase the volume or press VOLUME – to decrease it.



For private listening

Connect a pair of headphones to the PHONES jack. No sound comes out of the speakers. Be sure to turn down the volume before connecting or putting on headphones.



DO NOT turn off (on standby) the unit with the volume set to an extremely high level; otherwise, a sudden blast of sound can damage your hearing, speakers and/or headphones when you turn on the unit or start playing any source next time. REMEMBER you cannot adjust the volume level while the unit is on standby.

To turn down the volume level temporarily

Press FADE MUTING on the remote control. The volume level gradually decreases to "VOL MIN."



To restore the sound, press the button again.

Reinforcing the Bass Sound

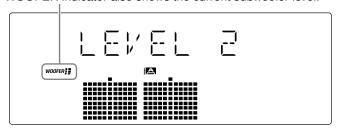
This function only affects the playback sound, not your recording.

Press SUBWOOFER LEVEL + to increase the subwoofer sound or SUBWOOFER LEVEL – to decrease it.



 The subwoofer level can be adjusted in 3 steps (LEVEL 1 — LEVEL 3).
 If you press SUBWOOFER LEVEL + to increase the level up to LEVEL 3, "MAX LEVEL" appears on the display.

WOOFER indicator also shows the current subwoofer level.



Enjoying the Heavy Sound

You can enjoy the heavy sound by using the sound turbo. The function boosts the low and high frequency sound. This function only affects the playback sound, not your recording.

Press SOUND TURBO.

The TURBO indicator lights up on the display.



• Each time you press SOUND TURBO, the sound turbo turns on and off alternately.

TURBO indicator





When you turn off the sound turbo

The subwoofer level is set to LEVEL 1.



When the sound turbo is on

Turning the SOUND MODE control (or pressing SOUND MODE on the remote control) cancels the sound turbo.



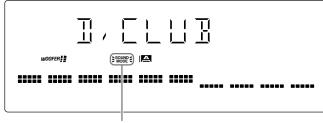
Selecting the Sound Modes

This function only affects the playback sound, not your recording.

You can select one of the 6 preset sound modes (3 surround modes and 3 SEA—Sound Effect Amplifier—modes).

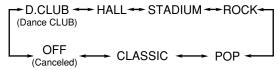
To select the sound modes, turn the SOUND MODE control until the sound mode you want appears on the display.





SOUND MODE indicator also lights up on the display

 As you turn the control, the sound modes change as follows:



Surround modes*:

D.CLUB: Increases resonance and bass.

HALL: Adds depth and brilliance to the sound.

STADIUM: Adds clarity and spreads the sound, like in an

outdoor stadium.

SEA (Sound Effect Amplifier) modes:

ROCK: Boosts low and high frequency. Good for

acoustic music.

POP : Good for vocal music. CLASSIC : Good for classical music.

OFF : Cancels the sound mode.

* Surround elements are added to the SEA elements to create being-there feeling in your room.

When one of these modes is selected, the SOUND MODE indicator lights up as \$SOUND &.

While one of the SEA modes (SEA elements without surround elements) is selected, the SOUND MODE indicator lights up as $^{\text{SOUND}}_{\text{MODE}}$.

• The corresponding sound mode lamp also flashes.

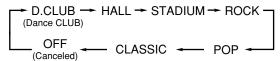


When the sound mode is set to OFF

All sound mode indicators do not flash but light up.

When using the remote control, press SOUND MODE to select the sound mode.

• Each time you press the button, the sound modes change as follows:





When the sound mode is activated

Pressing SOUND TURBO cancels the sound mode (set to OFF).

Turning On or Off the Key-touch Tone

If you do not want the key-touch tone to beep each time you press a button or turn a control, you can deactivate it.

- You can turn on or off the key-touch tone as follows:
 - -When the unit is off:
 - You can turn on or off the key-touch tone by operating the unit.
 - -When the unit is on:
 - You can turn on or off the key-touch tone by operating the unit or the remote control.

On the unit:

Press and hold BEEP for more than 2 seconds.



BEEP OFF

• Each time you press and hold the button, the key-touch tone turns on and off alternately.

On the remote control:

Press BEEP ON/OFF when the unit is on.

• Each time you press the button, the key-touch tone turns on and off alternately.



notes

Listening to the Radio



Tuning in to a Station—Auto Search

1 Press FM/AM.

The unit automatically turns on and tunes in to the previously tuned station (either FM or AM—MW).



• Each time you press the button, the band alternates between FM and AM (MW).

2 Start searching for stations.

On the unit:

Press and hold TUNING + or

TUNING – for more

than 1 second.

On the remote control:

Press and hold |◄◄/◄◄ or ▶►//►► for more than 1 second.



The unit starts searching for stations and stops when a station of sufficient signal strength is tuned in to. If a program is broadcast in stereo, the ST (stereo) indicator lights up.

To stop during searching, press TUNING + or TUNING – (or $| \blacktriangleleft | / \blacktriangleleft |$ or $| \triangleright | / \triangleright \triangleright |$ on the remote control).



When you press TUNING + or TUNING −

(or |◄◄/◄◄ or ▶►//▶► on the remote control) briefly and repeatedly

The frequency changes step by step.

To change the FM reception mode

When an FM stereo broadcast is hard to receive or noisy, press FM MODE on the remote control so that "MONO" appears and the MONO indicator also lights up on the display. Reception improves.



To restore the stereo effect, press FM MODE again so that "STEREO" appears on the display.

In this stereo mode, you can hear stereo sounds when a program is broadcast in stereo.

Presetting Stations

You can preset 30 FM and 15 AM (MW) stations.

In some cases, test frequencies have been already memorized for the tuner since the factory examined the tuner preset function before shipment. This is not a malfunction. You can preset the stations you want into memory by following the presetting method.

 There is a time limit in doing the following steps. If the setting is canceled before you finish, start from step 2 again.

On the unit ONLY:

- **1** Tune in to the station you want to preset (in this example, of FM 87.50).
 - See "Tuning in to a Station—Auto Search."

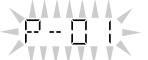


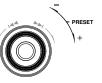
2 Press SET.



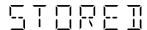


3 Turn the PRESET +/- control to select a preset number.





4 Press SET again





The tuned station in step 1 is stored in the preset number selected in step 3.

• Storing a new station on a used number erases the previously stored one.



When you unplug the AC power cord or if a power failure occurs

The preset stations will be erased in a few days. If this happens, preset the stations again.

Tuning in to a Preset Station

1 Press FM/AM.

• See "Tuning in to a Station—Auto Search," step **1** for details.



2 Select a preset number.
On the unit:
Turn the PRESET +/- control.



On the remote control: Press the number buttons.

Ex.: For preset number 5, press 5.
For preset number 15,
press +10 then 5.



For preset number 20, press +10, then 10.

For preset number 25, press +10, +10, then 5. For preset number 30, press +10, +10, then 10.

Receiving FM Stations with RDS

RDS (Radio Data System) allows FM stations to send an additional signal along with their regular program signals. For example, the stations send their station names, as well as information about what type of program they broadcast, such as sports or music, etc.

When tuned to an FM station which provides the RDS service, the RDS indicator lights up on the display.

With the unit, you can receive the following types of RDS signals.

PS (Program Service):

Shows commonly known station names.

RT (Radio Text):

Shows text messages the station sends.

CT (Clock Time):

Shows clock time the station sends.

PTY (**Program Type**):

Shows types of broadcast programs.

Enhanced Other Networks:

Provides the information about the types of the programs sent by other RDS stations.



More about RDS

- Some FM stations do not provide RDS signals.
- RDS services may vary among FM RDS stations. For details on RDS services in your area, check with local radio stations.
- RDS may not work correctly if the received station is not transmitting the signals properly or if the signal strength is weak.

Changing the RDS Information

You can see RDS information on the display while listening to an FM station.

Press DISPLAY MODE.

• Each time you press the button, the display changes as follows:



(or preset channel no.)

About characters shown on the display

When the display shows PS name, RT or CT signals:

- The display cannot differentiate upper case and lower case letters and always uses upper case letters.
- Some special characters and marks may not be displayed correctly.

"NO PS," "NO RT," or "NO CT" appears on the display.

Searching for Programs by PTY Codes (PTY Search)

One of the advantages of RDS is that you can locate a particular kind of program by specifying PTY codes.

• For details on the PTY codes, see "Additional Information" on page 30.

To search for a program using PTY codes

- PTY Search is applicable only to preset FM RDS stations. If not yet done, see "Presetting Stations" on page 12.
- There is a time limit in doing the following steps. If the setting is canceled before you finish, start from step 1 again.
- **1** Press RDS MODE while listening to an FM station.



2 Press SELECT + or SELECT – until the PTY code you want appears on the display.



NEWE

• Each time you press the button, PTY codes change as follows:

NEWS

AFFAIRS

INFO

SPORT

EDUCATE

DRAMA

CULTURE

SCIENCE

VARIED

POP M

ROCK M

M.O.R. M

LIGHT M

CLASSICS

OTHER M

WEATHER

FINANCE

CHILDREN

SOCIAL

RELIGION

PHONE IN

TRAVEL

LEISURE

JAZZ

COUNTRY

NATION M

OLDIES

FOLK M

DOCUMENT

(back to the beginning)

3 Press RDS MODE again while the PTY code selected in the previous step is still on the display.



The preset FM stations appear on the display with their preset numbers.

The unit searches 30 preset FM stations, stops when it finds the one you have selected and tunes in that station.

• If no program is found, the unit returns to the last received station.

To stop during searching

Press SELECT + or SELECT -.

To check the PTY, press RDS MODE once so that the current PTY code appears.

• "NO PTY" appears if no signal is sent.



Switching Temporarily to a Program Type of **Your Choice**

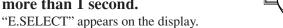
The Enhanced Other Networks function allows the unit to switch temporarily to a broadcast program of your choice (NEWS or INFO) from a different station.

To activate the Enhanced Other Networks function

Enhanced Other Networks function is applicable only to preset FM RDS stations. If not yet done, see "Presetting Stations" on page 12.

• There is a time limit in doing the following steps. If the setting is canceled before you finish, start from step 1 again.

7 Press and hold RDS MODE for more than 1 second.

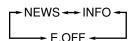




SELECT +

2 Press SELECT + or SELECT – to select the data type.

• Each time you press the button, the data type of the Enhanced Other Networks changes as follows:



NEWS: News

INFO: Program the purpose of which is to impart

advice in the widest sense.

E.OFF: The function is canceled.

The data type indicator (NEWS or INFO) you have selected also lights up on the display.

Now, the function is activated. See "How the Enhanced Other Networks function actually works."

To cancel the function, repeat from step 1 and select "E.OFF" in step 2.

The data type indicator (NEWS or INFO) goes off.

How the Enhanced Other Networks function actually works:

CASE 1

If there is no station broadcasting the program you have selected

The unit continues tuning in to the current station.



When a station starts broadcasting the program you have selected, the unit automatically switches to the station. The selected data type indicator starts flashing on the display.



When the program is over, the unit goes back to the previously tuned station, but the Enhanced Other Networks function still remains activated.

CASE 2

If there is a station broadcasting the program you have

The unit tunes in to the program. The selected data type indicator starts flashing.



When the program is over, the unit goes back to the previously tuned station, but the Enhanced Other Networks function still remains activated.

CASE 3

If the FM station you are listening to is broadcasting the program you have selected

The unit continues to receive the station but the selected data type indicator starts flashing.



When the program is over, the indicator stops flashing, but the Enhanced Other Networks function still remains activated.

More about the Enhanced Other Networks function

- · Enhanced Other Networks data sent from some stations may not be compatible with this unit. In this case, the Enhanced Other Networks function may not work correctly.
- While listening to a program tuned in by this function, the station does not change even if another network station starts broadcasting a program of the same Enhanced Other Networks
- If the stations alternate intermittently between the station tuned by this function and the currently tuned station, cancel this function by following the procedure in the left column.
- The Enhanced Other Networks function is canceled when you change the source to CD, TAPE or AUX.
- The Enhanced Other Networks function is temporarily canceled when you change the band to AM (MW).

Playing Back CDs

This unit has been designed to playback the following CDs:

- · Audio CD
- CD-R (CD-Recordable)
- CD-RW (CD-ReWritable)
- MP3 disc (MP3 files recorded on a CD-R or CD-RW)*

When playing a CD-R or CD-RW

- User-edited CD-Rs (CD-Recordable) and CD-RWs (CD-ReWritable) can be played back when they are already "finalized."
- Before playing back CD-Rs or CD-RWs, read their instructions or cautions carefully.
- Some CD-Rs or CD-RWs may not be played back on this unit because of their disc characteristics, damage or stain on them, or if the player's lens is dirty.

Important notices:

- In general, you will have the best performance by keeping your CDs and the mechanism clean.
 - Store CDs in their cases, and keep them in cabinets or on shelves.
 - Keep the unit's carrousel closed when not in use.
- Continuous use of irregular shaped discs (heart-shape, octagonal, etc.) can damage the disc rotating mechanism.





• CD-RWs may require a longer readout time since the reflectance of CD-RWs is lower than for regular CDs.

*For MP3 discs

- This unit manages files and folders on MP3 discs as "tracks" and "albums."
- Playback order of the MP3 files (tracks) recorded on a disc are determined by the writing (or encoding) application; therefore, playback order may be different from the one you have intended while recording the files and the folders.
- This unit show the file name—Available characters: 0–9, A–Z, _ (underscore)—on the display when the file (tracks) starts play; however some file names are not shown correctly.



More about MP3 discs

- MP3 discs (either CD-R or CD-RW) require a longer readout time. (It varies due to the complexity of the recording configuration.)
- When making an MP3 disc, select ISO 9660 Level 1 or Level 2 as the disc format.
- · This unit does not support multisession recording.
- This unit can play MP3 files only with the following file extensions—".MP3," ".Mp3," ".mP3," and ".mp3."
- Non-MP3 files are ignored. If non-MP3 files are recorded together
 with MP3 files, this unit will take a longer time to scan the disc. It
 may also cause the unit to malfunction.
- Some MP3 discs may not be played back because of their disc characteristics or recording conditions.

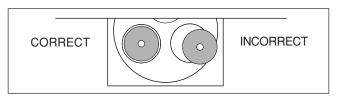
Loading CDs

1 Press **△**.

The unit automatically turns on and the carrousel comes out.



2 Place one or two discs correctly on the front recesses of the disc tray, with its label side up.



When using a CD single (8 cm), place it on the inner recess of the disc tray.

DISC CHANGE

3 If you wish to load a third disc, press DISC CHANGE on the unit or DISC SKIP on the remote control.



The disc tray rotates by 120°.

4 Press **≜** again.

The carrousel closes.



Playing Back CDs—All Disc and One Disc

You can play all loaded CDs continuously—All Disc play, or one selected disc—One Disc play.

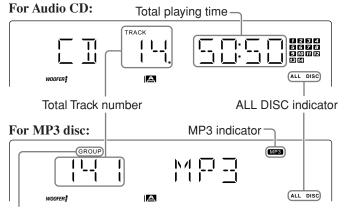
All Disc play

On the unit ONLY:

1 Load CDs.

- If the current playing source is not the CD player, press
 CD ►/II, then before going to the next step.
- **2** Press REPEAT repeatedly so that the ALL DISC indicator lights up on the display.





GROUP indicator appears when the MP3 playback mode is the ALBUM mode. See also page 19.

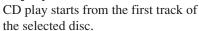


• Each time you press the button, the indication on the display changes as follows:



* See page 21.

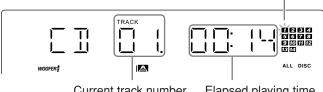
3 Press one of the disc number buttons (CD1, CD2 or CD3) for the disc you want to start to play from.



• Pressing CD ▶/II instead of the disc number buttons starts playing back if a CD is on the tray.

For Audio CD:

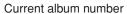
Track number of the currently playing disc flashes (Track numbers exceeding 16 are not displayed.)

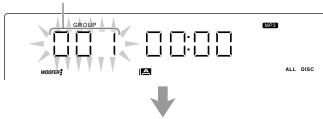


Current track number Elapsed playing time

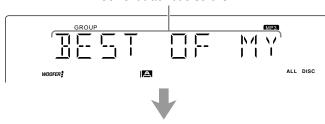
For MP3 disc:

• When the MP3 playback mode is the ALBUM mode (See also page 19.)





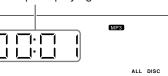
Current track title scrolls.



A

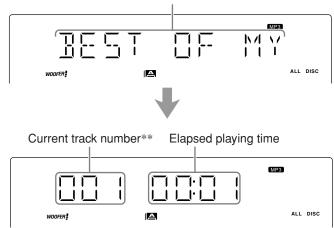
Current track number Elapsed playing time of the current album

GROUP



• When the MP3 playback mode is the TRACK mode (See also page 19.)

Current track title scrolls.



** In the TRACK mode, the unit manage only files (tracks) on the MP3 disc. Folders (albums) are not recognized.

To stop during play, press \blacksquare .

• For MP3 disc, this unit can store the number of the track that you have stopped playback. By pressing CD ▶/II, you can start playback again from the beginning of the same track—Resume play (see also page 19).

To remove the disc, press \triangle .



CD playback sequence

When 3 CDs are loaded on the disc trays, they are played in one of the following sequences.

- When CD1 is pressed : CD1 \Rightarrow CD2 \Rightarrow CD3 (then stops)
- When CD2 is pressed : CD2 \Rightarrow CD3 \Rightarrow CD1 (then stops)
- When CD3 is pressed : CD3 \Rightarrow CD1 \Rightarrow CD2 (then stops)
- When only 2 CDs are loaded, they are played in the same order, but the disc tray without a CD is skipped.

About the disc number lamps (CD1, CD2, and CD3)

- Each disc number lamp corresponds to the disc tray of the same
- The disc number lamp flashes while the corresponding CD is being played.
- The disc number lamp goes off when the unit has detected that there is no CD on the corresponding disc tray.

One Disc play

When 2 or 3 CDs are loaded on the disc trays, you can select one particular disc to be played back.

On the unit ONLY:

1 Load CDs.

• If the current playing source is not the CD player, press CD ▶/II, then ■ before going to the next step.

2 Press REPEAT repeatedly so that the 1 DISC indicator lights up on the display.



1 DISC indicator

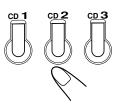
• Each time you press the button, the indication on the display changes as follows:



* See page 21.

3 Press one of the disc number buttons (CD1, CD2 or CD3) you want to listen.

Playback stops when all tracks of the selected disc are played once and resumes to All Disc play.



To stop during play, press \blacksquare .

 For MP3 disc, this unit can store the number of the track that you have stopped playback. By pressing CD ►/II, you can start playback again from the beginning of the same track—Resume play (see also page 19).

To remove the disc, press \triangle .

To exit from One Disc play, press REPEAT repeatedly so that ALL DISC indicator lights up on the display.



The following operations will also cancel the One Disc play and restore All Disc play when—

- Turning off the power,
- · Ejecting the carrousel, or
- Changing the source to play.

Basic CD Operations

While playing a CD, you can do the following operations.

To exchange CDs during playback of another

Press DISC CHANGE to change the CD and the carrousel comes out.

If you change CDs during play, the current play will not stop until all CDs you have changed are played.

DISC CHANGE

To close the carrousel, press DISC CHANGE or **△**.

To skip to the another CD in the carrousel

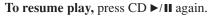
Press DISC SKIP on the remote control.



To stop play for a moment

Press CD ▶/II.

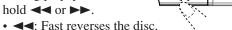
While pausing, "PAUSE" appears on the display.





To locate a particular point in a track

During play, press and



• ►►: Fast forwards the disc.

When using the remote control, press and hold |◄◄/◄◄ or ▶►|/▶►.



To go to another track

For Audio CD:

Turn the I◄◄/▶►I control before or during playback.



- Id: Goes back to the beginning of the current or previous tracks.
- Skips to the beginning of the next or succeeding tracks.

When using the remote control, press $|\blacktriangleleft|/|\blacktriangleleft|$ or $|\triangleright|/|\triangleright|$.





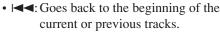
If you turn the |◀◀/▶►| control (or press |◀◀/◀◀ or ▶►|/▶► on the remote control) to select a track while playback is stopped

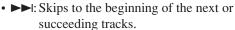
The selected track starts playback.

For MP3 disc:

When the MP3 playback mode is the TRACK mode (See also page 19.)

Turn the I◄◄/►►I control before or during playback.





When using the remote control, press $|\blacktriangleleft|/\blacktriangleleft|$ or $|\triangleright|/\triangleright|>$.





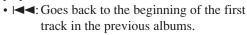
If you turn the |◄◄/▶▶| control (or press |◄◄/◄◄ or ▶▶|/▶▶ on the remote control) to select a track while playback is stopped

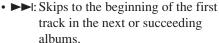
The selected track starts playback.

To go to another album on an MP3 disc

When the MP3 playback mode is the ALBUM mode (See also page 19.)

Turn the I◄◄/▶►I control before or during playback.





When using the remote control, press $| \blacktriangleleft | / \blacktriangleleft |$ or $| \triangleright | / \triangleright \triangleright |$.





If you turn the |◄◄/▶▶| control (or press |◄◄/◄◄ or ▶▶|/▶▶ on the remote control) to select an album while playback is stopped

The first track in the selected album starts playback.

To go to another track directly using the number buttons

For Audio CD:

Pressing the number button(s) before or during play allows you to start playing the selected track.

1 2 3 4 5 6 7 8 9 10 10

Ex.: For track number 5, press 5.

For track number 15, press +10, then 5.

For track number 20, press +10, then 10.

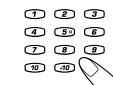
For track number 32, press +10, +10, +10, then 2.

For MP3 disc:

\bullet When the MP3 playback mode is the TRACK mode

(See also page 19.)

Pressing the number button(s) before or during play allows you to start playing the selected track on the disc.



Ex.: For track number 5, press 5.

For track number 15, press +10, then 5.

For track number 20, press +10, then 10.

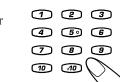
For track number 32, press +10, +10, +10, then 2.

For track number 123, press +10 twelve times, then 3.

• When the MP3 playback mode is the ALBUM mode

(See also page 19.)

Pressing the number button(s) before or during play allows you to start playing the selected track in the current album.



Ex.: For track number 5, press 5.

For track number 15, press +10, then 5.

For track number 20, press +10, then 10.

For track number 32, press +10, +10, +10, then 2.

For track number 123, press +10 twelve times, then 3.



If your entry is ignored

You have tried to enter a track number that does not exist on the disc or in the album (for example, selecting track 14 in the album that only has 12 tracks). Such entries are ignored.

Changing the MP3 Playback Mode

When playing an MP3 disc, you can choose the playback mode of the MP3 disc as follows:

• TRACK mode:

The unit recognizes only tracks (files). You can play an MP3 disc like an Audio CD.

• ALBUM mode:

The unit recognizes tracks (files) and albums (folders) on an MP3 disc. You can play an MP3 disc according to the way how they are grouped.

In this mode, you can do the following operations:

- Turning the I◀◀/▶▶I control (or pressing I◀◀/◀◀ or ▶►I/▶▶ on the remote control) allows you to skip to the first track of the previous or next albums. (See page 18.)
- Pressing the number button(s) allows you to start playing the selected track in the current album. (See page 18.)

On the remote control ONLY:

Press MP3 before or during playing an MP3 disc.





GROUP indicator appears when the MP3 playback mode is the ALBUM mode.

• Each time you press the button, the MP3 playback mode changes between "ALBUM" and "TRACK" alternately.

Turning On or Off the Resume Play for MP3 Disc

For MP3 disc, this unit can store the number of the track that you have stopped playback. By pressing CD ►/II, you can start playback again from the beginning of the same track—Resume play.

You can turn on and off the resume play for MP3 discs.

On the unit ONLY:

Press PROGRAM before or during playing an MP3 disc.





• Each time you press PROGRAM, the resume play turns on and off alternately.



The following operations will erase the memory of the track number that you have stopped playback when—

- Pressing one of the disc number buttons to change the disc to play.



You can arrange the order in which the tracks play before you start playing. You can program up to 32 tracks.

- To use Repeat play (see page 21) for Program play, press REPEAT after starting Program play.
- This function does not work for MP3 discs.

On the unit ONLY:

1 Load CDs.

• If the current playing source is not the CD player, press CD ►/II, then ■ before going to the next step.

2 Press PROGRAM so that "PROGRAM" appears on the display.



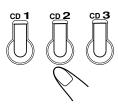
The PRGM (program) indicator also lights up on the display.

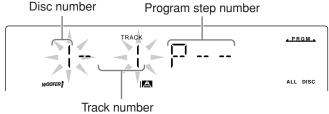
• All Disc play is selected automatically. You cannot select One Disc play for Program play.



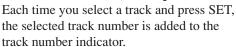
• If a program has been stored in memory, the program is called up.

3 Press one of the disc number buttons (CD1, CD2, and CD3) to select the disc number you want to play.

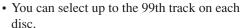




4 Turn the **|◄|>>**| control to select the track number, then press SET.











5 Program other tracks you want.

- To program tracks from the same disc, repeat step 4.
- To program tracks from a different disc, repeat steps 3 and **4**.

b Press CD ►/II.

The tracks are played in the order you have programmed.



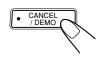
To stop during play, press ■.

To exit from Program play, press PROGRAM again before or after play so that the unit enters All Disc play. (The program you have made is stored in memory until you turn off the unit, eject the carrousel, or erase the program.)

• Program play is also canceled when you press **≜**.

To modify the program

Before playing, you can erase the last programmed track shown on the display by pressing CANCEL/DEMO.



• Each time you press the button, the last programmed track is erased from the program.

To check the program during play, perform the following procedure:

- You can check only the programmed tracks on the current disc at one time.
- 1 Press CD ►/II to pause Program play.
- **2** Turn the **◄◄/►►**I control.

The programmed tracks on the currently selected disc appear on the display in the programmed (or reverse) order.

- If tracks on another disc have been programmed, "PAUSE" appears on the display. To check the programmed tracks on another disc, press CD ►/II twice, then turn the I<-/>
 I control.
- Pressing CD ►/II again starts Program play from the track currently shown on the display.

To add tracks in the program before play, simply select the disc numbers and/or track numbers you want to add by following steps **3** and **4** of the programming procedure.

To erase the entire program before or during play, press ■ twice.

• Turning the power off or ejecting the carrousel will also erase the stored memory.



If you try to program a 33rd track

"FULL" will appear on the display.

If you have programmed a track from an empty tray, or a track number that does not exist on the disc Such program steps will be skipped.



If there is an MP3 disc on the disc tray

Even if you add tracks on the MP3 disc to the program in step 3 to 5, those tracks will be skipped.



Playing at Random—Random Play

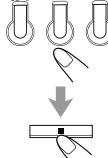
The tracks of the selected CD will play at random.

• To use Random play, you have to cancel the Program play.

On the unit ONLY:

1 Load a CD.

2 Press one of the disc number buttons (CD1, CD2, and CD3) for the disc you want to play, then press ■.



3 Press RANDOM so that "RANDOM" appears on the display.



The RANDOM indicator also lights up on the display.

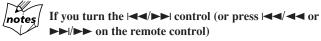
- Activating Random play cancels Repeat play or All Disc play. (One Disc play is automatically selected.)
- For MP3 discs, activating Random play changes the ALBUM mode to the TRACK mode.



• The tracks are played automatically at random. Random play ends when all tracks are played once.

To stop and cancel Random play, press ■.

- If you press RANDOM again during play, Random play is canceld and the unit enters All Disc play mode.
- Random play is also canceled when you press ▲.



Playback skips to the next track selected randomly.

Repeating Tracks or CDs—Repeat Play

You can have all the CDs, the program or the individual track currently playing repeat as many times as you like.

 Repeat play and Random play cannot be used at the same time.

On the unit ONLY:

To repeat play, press REPEAT during or before playing.



• Each time you press the button, Repeat play mode changes as follows, and the following indicator lights up on the display:



REPEAT 1: Repeats one track on one CD.

REPEAT 1 DISC**: Repeats all the tracks on one CD.

REPEAT ALL DISC: Repeats all the tracks on all the CDs, or all the tracks on the program.

- * See pages 15 and 17.
- ** REPEAT 1 DISC is not used for Program play.

To cancel Repeat play, press REPEAT repeatedly until the REPEAT indicator (REPEAT 1, REPEAT 1 DISC or REPEAT ALL DISC) goes off from the display.

• Repeat play is also canceled when you press \blacksquare or \triangle .

Prohibiting Disc Ejection—Carrousel Lock

You can prohibit CD ejection from the unit and can lock the carrousel.

• This operation is possible only while the unit is on with CD selected as the source.

On the unit ONLY:

To prohibit disc ejection, press \triangle for the carrousel while holding \blacksquare .

"LOCKED" appears for a while, and the carrousel is locked.



If you try to eject CDs

"LOCKED" appears to inform you that the Carrousel Lock is in use.

To cancel the prohibition and unlock the carrousel, press ≜ for the carrousel while holding ■.

"UN LOCKED" appears for a while, and the carrousel is unlocked.



When you unplug the AC power cord or if a power failure occurs

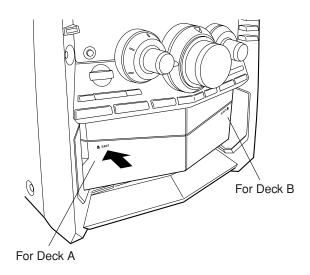
The setting of the Carrousel Lock will return to the initial setting (not to prohibit disc ejection) in a few days.

Playing Back Tapes

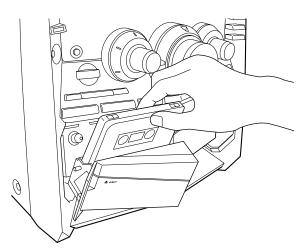


Playing Back a Tape

1 Press **≜** EJECT for the deck you want to use.



- **2** Put a cassette in, with the exposed part of the tape down and the side you want to play facing front.
 - You can play back only type I tapes.



 $\boldsymbol{\mathcal{J}}$ Close the cassette holder gently.

If you put cassettes in both decks A and B, the last deck which you have put a cassette into is selected.

To operate the other deck, press TAPE A/B (or A/B on the remote control).

4 Press TAPE ▶.

The tape play starts and the tape running indicator (►) starts flashing slowly.



When the tape plays to the end, the deck automatically stops.

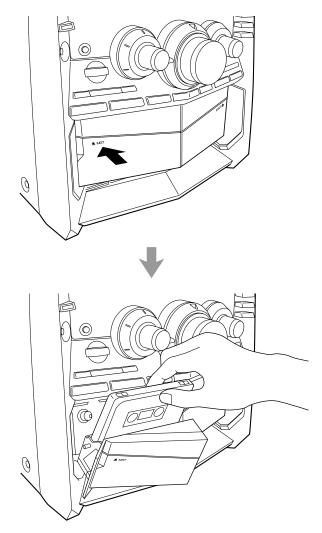
To stop during play, press ■.

To operate the other deck, press TAPE A/B (or A/B on the remote control), then TAPE ►.

To fast-forward the tape, press ►► (or ►► / ►► on the remote control). The tape running indicator (►) starts flashing quickly.

To rewind the tape, press ◀◀ (or ◄◄/◀◀ on the remote control). The tape running indicator (◄) starts flashing quickly.

To remove the cassette, press \triangle EJECT for deck A or EJECT \triangle for deck B.





The use of the C-120 or thinner tape is not recommended, since characteristic deterioration may occur and this tape easily jams in the pinchrollers and the capstans.

Recording

IMPORTANT:

- · It should be noted that it may be unlawful to re-record pre-recorded tapes, records, or discs without the consent of the owner of copyright in the sound or video recording, broadcast or cable program and in any literary, dramatic, musical, or artistic embodied therein.
- The recording level is automatically set correctly, so it is not affected by the VOLUME, the SUBWOOFER LEVEL, and the SOUND MODE controls. Thus, during recording you can adjust the sound you are actually listening to without affecting the recording level.
- While recording, you can hear the SOUND TURBO effect through the speakers or headphones. However, the sound is recorded without this effect (see page 10).
- If recordings you have made have excessive noise or static, the unit may be too close to a TV. Place the unit away from the TV.
- You can use type I tape for recording.

To protect your recording

Cassettes have two small tabs on the back to protect unexpected erasure or re-recording. To protect your recording,



remove these tabs.

To re-record on a protected tape, cover the holes with adhesive tape.

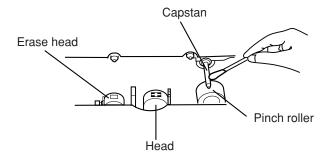
To keep the best recording and playback sound quality

If the heads, capstans, and pinch rollers of the cassette decks become dirty, the following will occur:

- · Impaired sound quality
- · Discontinuous sound
- Fading
- Incomplete erasure
- · Difficulty in recording

To clean the head, capstan, and pinch roller

Use a cotton swab moistened with alcohol.



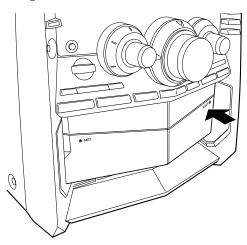
To demagnetize the head

Turn off the unit, and use a head demagnetizer (available at electronics and audio shops).

Recording a Tape on Deck B

On the unit ONLY:

1 Press EJECT **△** for deck B.



- **2** Put a recordable cassette in, with the exposed part of the tape down and the side you want to record facing front.
- **3** Close the cassette holder gently.
- 4 Start playing the source—FM, AM, CD player or auxiliary equipment connected to **AUX IN jacks.**
 - For duplicating tapes, see "Dubbing Tapes" on page 24.
 - For recording from CD, see "CD Synchronized Recording" on page 24.

5 Press REC START/STOP.

The REC (recording) indicator lights up on the display and recording starts.



To stop during recording, press REC START/STOP again

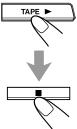
To remove the cassette, press EJECT \triangle for deck B.



Dubbing Tapes

On the unit ONLY:

1 Press TAPE \triangleright , then \blacksquare .



- **2** Put the source cassette in deck A, and a recordable cassette into deck B.
- **3** Press DUBBING.

Dubbing starts.

"DUBBING" appears, and the REC (recording) indicator lights up on the display.







To stop during dubbing, press REC START/STOP or ■.

To remove the cassettes, press \triangle EJECT for deck A and EJECT \triangle for deck B.

CD Synchronized Recording

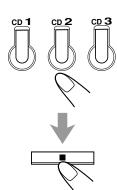
You can easily record a CD onto a tape.

- This function does not work for MP3 discs. When recording an MP3 disc onto a tape, see "Recording a Tape on Deck B" on page 23.
- You can also record the tracks in the order you have made the program.

If there is a track on the MP3 disc in the program, it will be skipped and some blank space will be recorded on the tape.

On the unit ONLY:

- **1** Put a recordable cassette into deck B.
- **2** Place a disc correctly on the recess of the disc tray, with its label side up.
- **3** Press one of the disc number buttons (CD1, CD2, and CD3) to select the disc, then ■.



4 Press CD REC START.

"CD REC" appears, and the REC (recording) indicator lights up on the display.





Deck B starts recording and the CD player starts playing. When the recording from the selected CD is done, the CD player and deck B stop.

• When recording your program, the CD player and deck B stop after all tracks in the program are recorded.

To stop during CD Synchronized Recording, press REC START/STOP or ■.

To remove the cassette, press EJECT \triangle for deck B.

Using the Timers

There are three timers available—Daily Timer, Recording Timer, and Sleep Timer.

Before using the timers, you need to set the clock built in the unit. (See "Setting the Clock" on page 9.)

Using Daily Timer

With Daily Timer, you can wake to your favorite music or radio program. You can set the timer whether the unit is on or off.

How Daily Timer actually works

The unit automatically turns on, set the volume level to the preset level, and starts playing the specified source when the on-time comes (the
indicator flashes while the timer is operating). Then, when the off-time comes, the unit automatically turns off (stands by).

Daily Timer works every day unless you cancel it.

- There is a time limit in doing the following steps. If the setting is canceled before you finish, start from step **1** again.
- If you have made a mistake while setting timer, press CANCEL/DEMO. (However, this does not always work. If CANCEL/DEMO does not work, press CLOCK/TIMER repeatedly and start from step 1 again.)

Before you start...

- When using a CD as the source to play:
 - —Make sure there is a CD on the currently selected disc number tray.
- When using a tape as the source to play:
 - —Make sure that a tape is in the deck whose deck indicator (A or B) is lit on the display.
- When using the external component as the source to play:
 - —Set the timer equipped with the external component at the same time.

On the unit ONLY:

1 Press CLOCK/TIMER repeatedly until "DAILY" appears on the display.



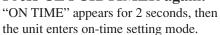
• indicator lights up and the DAILY (daily timer) indicator starts flashing on the display.



• Each time you press the button, the clock/timer setting modes change as follows:



2 Press CLOCK/TIMER again.





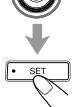


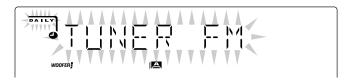
- **3** Set the on-time you want the unit to turn on.
 - 1) Turn the I◄◄/▶►I control to set the hour, then press SET.
 - 2) Turn the I◀◀/▶►I control to set the minute, then press SET.
 - "OFF TIME" appears for 2 seconds, then the unit enters off-time setting mode.



- **4** Set the off-time you want the unit to turn off (on standby).
 - 1) Turn the I◄◄/▶►I control to set the hour, then press SET.
 - 2) Turn the ► control to set the minute, then press SET.

The unit enters source selecting mode.

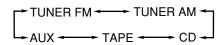






5 Turn the | **◄ ◄ >** | control to select the source to play, then press SET.

• Each time you turn the I◀◀/▶►I control, the source changes as follows:





TUNER FM: tunes in to a specified preset FM station.

 \rightarrow go to step **6**.

TUNER AM: tunes in to a specified preset AM station.

 \rightarrow go to step **6**.

CD : plays the current disc from the first track.

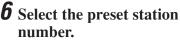
 \rightarrow go to step 7.

TAPE: plays a tape in deck A or B.

 \rightarrow go to step 7.

AUX : plays an external source.

 \rightarrow go to step 7.



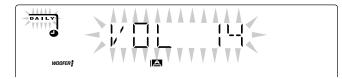
Turn the I◀◀/▶▶I control to select the preset station number, then press SET. The unit enters volume setting mode.



7 Turn the |◀◀/▶▶| control to set the volume level.

• You can select the volume level from VOL MIN, VOL 1 — VOL 30, and VOL MAX.





8 Press SET to complete the Daily Timer setting.

The DAILY (daily timer) indicator stops flashing and remains lit. The settings you have done are shown on the display in sequence for your confirmation.

9 Press **O/I** to turn off the unit (on standby) if you have set the Daily Timer with the unit turned on.



If the unit is turned on when the timer-on time comes Daily Timer does not work.

To turn on or off Daily Timer after its setting is done

1 Press CLOCK/TIMER repeatedly until "DAILY" appears on the display.



2 To turn off the Daily Timer, press CANCEL/DEMO.

The DAILY (daily timer) indicator goes off from the display ("OFF" appears for a while).

The Daily Timer is canceled, but the setting for the Daily Timer remains in memory until you change it.

To turn on the Daily Timer, press SET.

The DAILY (daily timer) indicator lights

The DAILY (daily timer) indicator lights up on the display. The settings you have done are shown on the display in sequence for your confirmation.



Using Recording Timer

With Recording Timer, you can make a tape of a radio broadcast automatically. You can set the timer whether the unit is on or off.

How Recording Timer actually works

The unit automatically turns on, tunes in to the specified station, sets the volume level to "VOL MIN," and starts recording when the on-time comes (the indicator flashes while the timer is operating). Then, when the off-time comes, the unit automatically turns off (stands by).

Recording Timer works only once, but the timer setting remains in memory until you change it.

- There is a time limit in doing the following steps. If the setting is canceled before you finish, start from step 2 again.
- If you have made a mistake while setting the timer, press CANCEL/DEMO. (However, this does not always work. If CANCEL/DEMO does not work, press CLOCK/TIMER repeatedly and start from step **2** again.)

On the unit ONLY:

1 Put a recordable cassette into deck B.

2 Press CLOCK/TIMER repeatedly until "REC" appears on the display.



• indicator lights up and the REC (recording timer) indicator starts flashing on the display.



• Each time you press the button, the clock/timer setting modes change as follows:



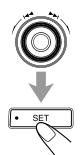
3 Press CLOCK/TIMER again.

"ON TIME" appears for 2 seconds, then the unit enters on-time setting mode.

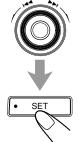




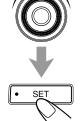
- 4 Set the on-time you want the unit to turn on.
 - Turn the I◄◄/►►I control to set the hour, then press SET.
 - 2) Turn the ◄◄/▶►I control to set the minute, then press SET.
 "OFF TIME" appears for 2 seconds, then the unit enters off-time setting mode



- **5** Set the off-time you want the unit to turn off (on standby).
 - 1) Turn the |◀◀/▶▶| control to set the hour, then press SET.
 - Turn the I◄◄/►►I control to set the minute, then press SET.
 The unit enters preset station selecting mode



- **6** Select the preset station.
 - 1) Turn the ◄◄/▶►I control to select the band ("TUNER FM" or "TUNER AM"), then press SET.
 - 2) Turn the I◀◀/▶▶I control to select a preset channel number, then press SET. The REC (recording timer) indicator stops flashing and remains lit. The settings you have done are shown on the display in sequence for your confirmation.



7 Press **O/I** to turn off the unit (on standby) if necessary.





About the recording source

If you change the source while recording, the recording source also changes.



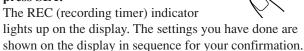
To turn on or off Recording Timer after its setting is done

- 1 Press CLOCK/TIMER repeatedly until "REC" appears on the display.
- 2 To turn off the Recording Timer, press CANCEL/DEMO.

 The REC (recording timer) indicator.

The REC (recording timer) indicator goes off from the display ("OFF" appears for a while). The Recording Timer is canceled, but the setting for the Recording Timer remains in memory until you change it.

To turn on the Recording Timer, press SET.





With Sleep Timer, you can fall asleep to music. You can set Sleep Timer when the unit is turned on.

How Sleep Timer actually works

The unit automatically turns off after the specified time length passes.

On the remote control ONLY:

1 Press SLEEP.

The time length until the shut-off time appears and the SLEEP indicator starts flashing on the display.



• Each time you press the button, the time length changes as follows:

2 Wait for about 3 seconds after specifying the time length.

The SLEEP indicator stops flashing and remains lit.

To check the remaining time until the shut-off time, press SLEEP once so that the remaining time until the shut-off time appears for about 3 seconds.

To change the shut-off time, press SLEEP repeatedly until the desired time length appears on the display.

To cancel the setting, press SLEEP repeatedly until "OFF" appears on the display so that the SLEEP indicator goes off from the display.

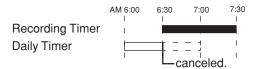
• Sleep Timer is also canceled when you turn off the unit.

Timer Priority

Since each timer can be set separately, you may wonder what happens if the setting for these timers overlaps. Here are some examples.

• Recording Timer has priority over Daily Timer.

If Recording Timer is set to come on while Daily Timer is operating, Daily Timer is canceled and Recording Timer start working.



• If Sleep Timer overlaps with another timer (either Daily Timer or Recording Timer), a timer with the earlier shut-off time has priority.



When using the Recording Timer and Sleep Timer at the same time, pay special attention to the shut-off time.

Maintenance



To get the best performance of the unit, keep your discs, tapes, and mechanism clean.

Cleaning the unit

· Stains on the unit

Should be wiped off with a soft cloth. If the unit is heavily stained, wipe it with a cloth soaked in water-diluted neutral detergent and wrung well, then wipe clean with a dry cloth.

- Avoid the following since they may cause damage to the unit.
 - DO NOT wipe it with a hard cloth.
 - DO NOT wipe it strong.
 - DO NOT wipe it with thinner or benzine.
 - DO NOT apply any volatile substance such as insecticides to it.
 - DO NOT allow any rubber or plastic to remain in contact with it for a long time.

Handling discs



- Remove the disc from its case by holding it at the edge while pressing the center hole lightly.
- Do not touch the shiny surface of the disc, or bend the disc.
- Put the disc back in its case after use to prevent warping.



- Be careful not to scratch the surface of the disc when placing it back in its case.
- Avoid exposure to direct sunlight, temperature extremes, and moisture.



To clean the disc

Wipe the disc with a soft cloth in a straight line from center to edge.



DO NOT use any solvent—such as conventional record cleaner, spray, thinner, or benzine—to clean the disc.

Handling cassette tapes



- If the tape is loose in its cassette, take up the slack by inserting a pencil in one of the reels and rotating.
- If the tape is loose, it may get stretched, cut, or caught in the cassette.
- Be careful not to touch the tape surface.



- · Avoid the following places to store the
 - In dusty places
 - In direct sunlight or heat
 - In moist areas
 - Near a magnet

Additional Information



Description of the PTY codes:

NEWS:	News.	WEATHER:	Weather reports and forecasts.
AFFAIRS:	Topical program expanding or enlarging upon the news — debate, or analysis.	FINANCE:	Stock Market reports, commerce, trading etc
		CHILDREN:	Programs targeted at a young audience.
INFO:	Program the purpose of which is to impart advice in the widest sense.	SOCIAL:	Programs about sociology, history, geography, psychology and society.
SPORT:	Program concerned with any aspect of sports.	RELIGION:	Religious programs.
EDUCATE:	Educational programs.	PHONE IN:	Involving members of the public expressing their views either by phone or at a public
DRAMA:	All radio plays and serials.		
CULTURE:	Programs concerning any aspect of national or regional culture, including language, theatre, etc.	TRAVEL:	forum. Travel information.
SCIENCE:	Programs about natural sciences and technology.	LEISURE:	Programs about recreational activities.
		JAZZ:	Jazz music.
VARIED:	Used for mainly speech-based programs like quizzes, panel games and personality interviews.	COUNTRY:	Songs which originate from, or continue the musical tradition of the American Southern States.
POP M:	Commercial music of current popular appeal.	NATION M:	Current popular music of the nation or region in that country's language.
ROCK M:	Rock music.	OLDIES:	Music from the so-called "golden age" of
M.O.R. M:	Current contemporary music considered to be "easy-listening."	OLDIES.	popular music.
		FOLK M:	Music which has its roots in the musical culture of a particular nation.
LIGHT M:	Instrumental music, and vocal or choral works.		
CLASSICS:	Performances of major orchestral works, symphonies, chamber music, etc.	DOCUMENT:	Program concerning factual matters, presented in an investigative style.
OTHER M:	Music not fitting into any of the other categories.		

Classification of the PTY codes for some FM stations may be different from the above list.

Troubleshooting



If you are having a problem with your unit, check this list for a possible solution before calling for service. If you cannot solve the problem from the hints given here, or the unit has been physically damaged, call a qualified person, such as your dealer, for service.

Symptom	Cause	Action	
Unable to cancel the display demonstration.	Other buttons are pressed to cancel the display demonstration.	Press CANCEL/DEMO on the unit. (See page 8.)	
No sound is heard.	Connections are incorrect or loose.	Check all connections and make corrections. (See pages 6 to 8.)	
Hard to listen to broadcasts because of noise.	 Antennas are disconnected. The AM (MW) loop antenna is too close to the unit. The FM antenna is not properly extended and positioned. 	 Reconnect the antennas correctly and securely. Change the position and direction of the AM (MW) loop antenna. Extend the FM antenna at the best position. 	
The disc sound is discontinuous.	The disc is scratched or dirty.	Clean or replace the disc. (See page 29.)	
The carrousel does not open or close.	The AC power cord is not plugged in.The carrousel is locked.	Plug the AC power cord.Unlock the carrousel. (See page 21.)	
The disc does not play.	The disc is placed upside down.	Place the disc with the label side up.	
The MP3 disc does not play.	 No MP3 files are recorded on the disc. MP3 files do not have the file extension—.MP3, .Mp3, .mP3, or .mp3 in their file names. MP3 files are not recorded in the format compliant with ISO 9660 Level 1 or Level 2. 	Replace the disc.	
The readout time of the MP3 disc is too long.	The readout time varies with the complexity of the recording configuration.	Do not use too many hierarchies and folders when recording. Also, do not record any other types of audio tracks together with MP3 files. (See page 15.)	
The cassette holders cannot be opened.	Power supply from the AC power cord has been cut off while the tape was running.	Turn on the unit.	
Impossible to record.	Small tabs on the back of the cassette are removed.	Cover the holes with adhesive tape.	
Operations are disabled.	The built-in microprocessor may malfunction due to external electrical interference.	Unplug the AC power cord and then plug it back in.	
Unable to operate the unit from the remote control.	 The path between the remote control and the remote sensor on the unit is blocked. The batteries are exhausted. 	Remove the obstruction.Replace the batteries.	

Specifications

Design and specifications are subject to change without notice.



CA-MXGT88

Amplifier section

Output Power

SUBWOOFERS: 100 W per channel, min. RMS, driven

into 6 Ω at 63 Hz with no more than 10% total harmonic distortion.

(IEC268-3)

75 W per channel, min. RMS, driven into 6 Ω at 63 Hz with no more than 0.9% total harmonic distortion.

(DIN)

MAIN SPEAKERS: 55 W per channel, min. RMS, driven

into 4 Ω at 1 kHz with no more than 10% total harmonic distortion.

(IEC268-3)

35 W per channel, min. RMS, driven into 4 Ω at 1 kHz with no more than 0.9% total harmonic distortion.

(DIN)

Audio input sensitivity/Impedance

(at 1 kHz, measured at MAIN SPEAKERS)

AUX: $400 \text{ mV/} 50 \text{ k}\Omega$

Speakers/Impedance : Subwoofers : $6 \Omega - 16 \Omega$

Main speakers : $4 \Omega - 8 \Omega$

Tuner

FM tuning range : 87.50 MHz - 108.00 MHzAM (MW) tuning range : 522 kHz - 1629 kHz

CD player

CD Capacity : 3 CDs Dynamic range : 85 dB Signal-to-noise ratio : 85 dB

Cassette deck

Frequency response

Normal (type I): $50 \text{ Hz} - 14\,000 \text{ Hz}$ Wow and flutter : 0.15% (WRMS)

General

Power requirement : AC 230 V \sim , 50 Hz Power consumption : 160 W (at operation)

18 W (on standby; with power saving

off—Normal Mode)

2.3 W (on standby; with power saving

on—Eco mode)

Dimensions (approx.): 270 mm x 317 mm x 453 mm (W/H/D)

Mass (approx.) : 9.3 kg

Supplied accessories

See page 6.

CA-MXGA77

Amplifier section

Output Power

SUBWOOFERS : 80 W per channel, min. RMS, driven

into 6 Ω at 63 Hz with no more than 10% total harmonic distortion.

(IEC268-3)

65 W per channel, min. RMS, driven into 6 Ω at 63 Hz with no more than 0.9% total harmonic distortion.

(DIN)

MAIN SPEAKERS: 45 W per channel, min. RMS, driven

into 4 Ω at 1 kHz with no more than 10% total harmonic distortion.

(IEC268-3)

30 W per channel, min. RMS, driven into 4 Ω at 1 kHz with no more than 0.9% total harmonic distortion.

(DIN)

Audio input sensitivity/Impedance

(at 1 kHz, measured at MAIN SPEAKERS)

AUX : $400 \text{ mV/} 50 \text{ k}\Omega$

Speakers/Impedance : Subwoofers : $6 \Omega - 16 \Omega$

Main speakers : $4 \Omega - 8 \Omega$

Tuner

FM tuning range : 87.50 MHz - 108.00 MHzAM (MW) tuning range : 522 kHz - 1629 kHz

CD player

CD Capacity: 3 CDs Dynamic range: 85 dB Signal-to-noise ratio: 85 dB

Cassette deck

Frequency response

Normal (type I): 50 Hz — 14 000 Hz Wow and flutter : 0.15% (WRMS)

General

Power requirement : AC 230 V √, 50 Hz Power consumption : 150 W (at operation)

17 W (on standby; with power saving

off—Normal Mode)

2.3 W (on standby; with power saving

on—Eco mode)

Dimensions (approx.): 270 mm x 317 mm x 453 mm (W/H/D)

Mass (approx.) : 9 kg

Supplied accessories

See page 6.





JVC INSTRUCTIONS



SPEAKER SYSTEM SP-MXGA77

BEDIENUNGSANLEITUNG: LAUTSPRECHERSYSTEM MANUEL D'INSTRUCTIONS: SYSTEME DES ENCEINTES **GEBRUIKSAANWIJZING: LUIDSPREKERSYSTEEM** MANUAL DE INSTRUCCIONES: SISTEMA DE ALTAVOCES

ISTRUZIONI: SISTEMA DI ALTOPARLANTI BRUKSANVISNING: HÖGTALARSYSTEM KÄYTTÖOHJE: KAIUTINJÄRJESTELMÄ **VEJLEDNING: HØJTTALERSYSTEM**

Thank you for purchasing JVC speakers.

Before you begin using them, please read the instructions carefully to be sure you get the best possible performance. If you have any questions, consult your JVC dealer.

Vielen Dank für den Kauf dieser JVC-Lautsprecher.

Lesen Sie bitte diese Bedienungsanleitung vor Ingebrauchnahme sorgfältig durch, um stets optimale Ergebnisse zu erzielen. Wenden Sie sich bei etwaigen Fragen bitte an Ihren JVC Händler.

Nous vous remercions pour l'achat de ces enceintes JVC.

Avant de les utiliser, lire ces instructions avec attention pour en obtenir les meilleures performances possibles. En cas de questions, consulter votre revendeur JVC.

Dank u voor de aanschaf van deze JVC luidsprekers.

Lees alvorens over te gaan tot aansluiten, deze gebruiksaanwijzing door zodat u de best mogelijke prestaties zult verkrijgen. Neem kontakt op met de JVC dealer indien u vragen heeft.

Le estamos muy agradecidos por haber adquirido estos altavoces de JVC.

Antes de utilizarlos, sirvase leer las instrucciones detenidamente a fin de obtener el mejor rendimiento posible. Si tienenaluna pregunta, acuda a su agente de JVC.

Grazie per aver acquistato questi altoparlanti della JVC.

Prima di cominciare l'uso degli altoparlanti, leggete attentamente le istruzioni per assicurare le migliori prestazioni. Qualora sorgessero dei dubbi, rivolgetevi al vostro rivenditore JVC.

Tack för ditt val av dessa JVC-högtalare.

Innan du kopplar in högtalarna i din ljudanläggning bör du för att få maximala prestanda från högtalarna läsa igenom bruksanvisningen noggrant. Kontakta din JVC-återförsäljare om du har frågor eller känner dig osäker.

Kiitos siitä että päädyit valinnassasi JVC-kaiuttimiin.

Ennen kuin alat käyttää niitä, lue käyttöohje huolellisesti, jotta ne toimisivat parhaalla mahdollisella tavalla. Jos Sinulla on kysyttävää ota yhteys JVC-edustajaan.

Tak for købet af JVC-højttalerne.

Gennemlæs venligst vejledningen omhyggeligt før de tages i brug, så De kan opnå den bedst mulige ydelse. Forhør hos Deres JVC forhandler hvis De har nogen spørgsmål.

SAFETY INSTRUCTIONS — "SOME DOS AND DON'TS ON THE SAFE USE OF EQUIPMENT"

_ 1 ___

This equipment has been designed and manufactured to meet international safety standards but, like any electrical equipment, care must be taken if you are to obtain the best results and safety is to be assured.

Do read the operating instructions before you attempt to use the

Do ensure that all electrical connections (including the mains plug, extension leads and interconnections between pieces of equipment) are properly made and in accordance with the manufacturer's instructions. Switch off and withdraw the mains plug when making or changing connections.

Do consult your dealer if you are ever in doubt about the installation, operation or safety of your equipment.

Do be careful with glass panels or doors on equipment.

DON'T continue to operate the equipment if you are in any doubt about it working normally, or if it is damaged in any way — switch off, withdraw the mains plug and consult your dealer.

DON'T remove any fixed cover as this may expose dangerous

DON'T leave equipment switched on when it is unattended unless it is specifically stated that it is designed for unattended operation or has a standby mode.

Switch off using the switch on the equipment and make sure that your family know how to do this.

Special arrangements may need to be made for infirm of handicapped people.

DON'T use equipment such as personal stereos or radios so that you are distracted from the requirements of traffic safety. It is illegal to watch television whilst driving.

DON'T listen to headphones at high volume as such use can permanently damage your hearing.

DON'T obstruct the ventilation of the equipment, for example with curtains or soft furnishing.

Overheating will cause damage and shorten the life of the equipment. DON'T use makeshift stands and NEVER fix legs with wood screws to ensure complete safety always fit the manufacturer's approved

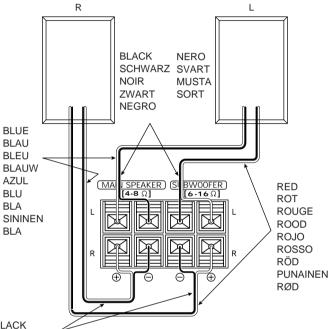
stand or legs with the fixings provided according to the instructions. DON'T allow electrical equipment to be exposed to rain or moisture.

- NEVER let anyone, especially children, push anything into holes, slots or any other opening in the case.
- this could result in a fatal electrical shock;
- NEVER guess or take chances with electrical equipment of any kind
- it is better to be safe than sorry!

Connection Anschluß Raccordement Aansluiting Conexión Collegamento Ansluiting Liitäntä Tilslutning

Right speaker
Rechter Lautsprecher
Enceinte de droite
Rechter spreker
Altavoz derecho
Altoparlante destro
Höger högtalare
Oikea kaiutin
Højre højttaler

Left speaker
Linker Lautsprecher
Enceinte de gauche
Linker spreker
Altavoz izquierdo
Altoparlante sinistro
Vänster högtalare
Vasen kaiutin
Venstre høittaler



BLACK SCHWARZ NOIR ZWART NEGRO NERO SVART MUSTA SORT

Amplifier output terminals
Ausgang des Verstärkers
Bornes de sortie de l'amplificaterur
Uitgangsaansluitengen van de versterker
Terminales de salida de amplificador
Terminali de uscita dell'amplifcator
Utgångar på förstärkaren
Vahvistimen ulostuloliittimet
Forstærkerudgangsbøsninger

CONNECTION

- DO NOT use other amplifier to operate this speaker system except for CA-MXGA77.
- Turn off power to the whole system before connecting the speakers to the amplifier.
- The maximum power handling capacity of the SP-MXGA77 main speaker is 55 W Subwoofer is 100 W. Excessive input will result in abnormal noise and possible damage. In cases where the signals described below are applied to the speakers, even if the signals are below the maximum allowable input, they may cause an overload and burn the wiring of the speakers. Be sure to lower the amplifier volume beforehand.
- 1) Noise during FM tuning.
- 2) High level signals containing high frequency components produced by a tape deck in the fast forward mode.
- Click noise produced when turning power of other components on and off.
- 4) Click noise produced when connecting or disconnecting cords with the power on.
- 5) Click noise produced when the cartridge is replaced with the power on.
- 6) Click noise produced when operating amplifier switches.
- 7) Continuous high frequency oscillation or high pitch electronically produced musical instrument sound.
- 8) Howling when using a microphones.

SPECIFICATIONS

Type : 3-way 3-speaker Bass-Reflex

Type

Twin Hyper Power-Drive

Subwoofer

Speakers:

Power Handling Capacity:

Subwoofer : 100 W Main Speaker : 55 W

Impedance:

 $\begin{array}{lll} \text{Subwoofer} & : 6 \ \Omega \\ \text{Main Speaker} & : 4 \ \Omega \end{array}$

Frequency Range:

Subwoofer : 32 Hz — 90 Hz
Main Speaker : 90 Hz — 20 000 Hz

Sound Pressure Level:

Subwoofer : 86 dB/W·m Main Speaker : 75 dB/W·m

Dimensions (W \times H \times D) : 290 mm \times 317 mm \times 336 mm

Mass : 5.5 kg each

Design and specifications subject to change without notice.

ANSCHLUSS

- Verwenden Sie zum Betrieb dieses Lautsprechersystems keinen anderen Verstärker, ausgenommen CA-MXGA77.
- Schalten Sie vor dem Anschluß der Lautsprecher an den Verstärker die Spannungsversorgung des gesamten Systems aus.
- Die maximale Belastbarkeit des SP-MXGA77-Hauptlautsprechers ist 55 W und die des Subwoofers ist 100 W. Eine Überlastung führt zu Verzerrungen und möglicherweise zu Beschädigungen. Signale der unten beschriebenen Art können, auch wenn sie unter dem maximal zulässigen Eingang liegen, eine Überlastung verursachen und die Lautsprecherwicklungen durchbrennen. Verringern Sie vorher die Lautstärke des Verstärkers.
- 1) Geräusche beim Einstellen von UKW-Sendern.
- 2) Hochpegelige Signale mit Hochfrequenz-Anteilen, die von Tonbanddecks beim Schnellvorspulen erzeugt werden.
- 3) Klickgeräusche, wenn die Spannungsversorgung anderer Komponenten ein-und ausgeschaltet wird.
- Klickgeräusche, wenn Kabel angeschlossen oder abgetrennt werden, während die Spannungsversorgung eingeschaltet ist.
- 5) Klickgeräusche, wenn der Tonabnehmer des Plattenspielers ausgewechselt wird, während die Spannungsversorgung eingeschaltet ist.
- 6) Klickgeräusche, die beim Betätigen von Schaltern des Verstärkers erzeugt werden.
- Ständige Hochfrequenzschwingungen oder elektronisch erzeugte Töne von Musikinstrumenten mit hohen Tonhöhen.
- 8) Rückkopplungen von Mikrofonen.

RACCORDEMENT

- NE PAS utiliser d'autre amplificateur que le CA-MXGA77 pour faire fonctionner les enceintes.
- Mettre hors circuit tout le système avant de raccorder les enceintes à l'amplificateur.
- La puissance maximale admissible par le haut-parleur principal du SP-MXGA77 est de 55 W, celle admissible par le haut-parleur d'extrêmes graves est de 100 W. En dépassant la puissance admissible, cela provoquera des bruits anormaux et détériorera les enceintes. Au cas où les signaux décrits ci-dessous sont envoyés aux enceintes, et même si ces signaux sont inférieurs à la puissance d'entrée maximum admissible, ils risquent de provoquer une surcharge ou même un incendie. S'assurer de bien diminuer le volume sonore de l'amplificateur.
- 1) Parasites durant une syntonisation FM.
- Signaux de niveau élevé contenant des composants à haute fréquence, comme ceux générés par une platine d'enregistrement en mode avance rapide.
- 3) Cliquetis se produisant lorsque d'autres appareils sont mis en ou hors circuit.
- 4) Cliquetis se produisant lorsque des appareils sont branchés ou dé-branchés alors que leur alimentation est en circuit.
- Cliquetis se produisant lorsque la cellule d'une platine tourne-disque est changée alors que l'alimentation est en circuit.
- 6) Cliquetis se produisant lorsque les commandes de l'amplificateur sont manipulées.
- Oscillations continuelles à haute fréquence ou sons très aigus provenant d'instruments de musique électroniques.
- 8) Hurlements dus à l'utilisation de micros.

TECHNISCHE DATEN

Typ : 3-Weg, 3-Lautsprecher-

Baßreflexbox

Twin Hyper Power-Drive

Subwoofer

Lautsprecher:

Subwoofer : 13,5 cm Konus \times 1 Hauptwoofer : 16,0 cm Konus \times 1 Hochtöner : 5,0 cm konus \times 1

Belastbarkeit:

Subwoofer : 100 W Hauptlautsprecher : 55 W

Impedanz:

Subwoofer : 6Ω Hauptlautsprecher : 4Ω

Frequenzbereich:

Subwoofer : 32 Hz — 90 Hz Hauptlautsprecher : 90 Hz — 20 000 Hz

Schalldruckpegel:

Subwoofer : 86 dB/W⋅m Hauptlautsprecher : 75 dB/W⋅m

Abmessungen (B \times H \times T) : 290 mm \times 317 mm \times 336 mm

Gewicht : Je 5,5 kg

Technische Änderungen vorbehalten.

CARACTÉRISTIQUES

Type : Enceinte 3 voices, 3 haut-

parleurs type à réflexion des

basses

Twin Hyper Power-Drive

Subwoofer

Haut-parleurs:

Extrêmes graves : conique de 13,5 cm \times 1 Principal : conique de 16,0 cm \times 1 Aigus : conique de 5,0 cm \times 1

Puissance maximale admissible:

Haut-parleur d'extrêmes graves : 100 W Haut-parleur principal : 55 W

Impédance:

Haut-parleur d'extrêmes graves : 6 Ω Haut-parleur principal : 4 Ω

Bande passante:

Haut-parleur d'extrêmes graves : 32 Hz — 90 Hz Haut-parleur principal : 90 Hz — 20 000 Hz

Pression sonore:

Haut-parleur d'extrêmes graves : 86 dB/W⋅m Haut-parleur principal : 75 dB/W⋅m

Dimensions (L \times H \times P) : 290 mm \times 317 mm \times 336 mm

Masse : 5,5 kg chaque

Présentation et caractéristiques modifiables sans préavis.

AANSLUITINGEN

- Gebruik GEEN andere versterker dan de CA-MXGA77 om dit luidsprekersysteem aan te sturen.
- Schakel de spanning van alle aangesloten komponenten uit alvorens de luidsprekers met de versterker te verbinden.
- Het maximale vermogen van de SP-MXGA77 hoofdluidspreker is 55 W en van de subwoofer 100 W. Te hoge ingang kan in abnormale geluidsreproduktie en in beschadigingen resulteren.

Overbelasting en verbranding van de bedrading kan worden veroorzaakt, wanneer de hieronder beschreven signalen naar de luidspekers worden gevoed, zelfs wanneer de signalen onder het maximaal toegestane ingangsvermogen zijn. Verminder eerst het volume van de versterker.

- 1) Ruis, zoals dit optreedtijdens afstemming op een FM-zender.
- Hoogfrekwentie signalen van een hoog niveau, zoals die tijdens het vooruitspoelen van een tapedeck worden geproduceerd.
- 3) Klikkende geluiden, die worden veroorzaakt door het in en uitschakelen van de netspanning van andere komponenten.
- 4) Klikkende geluiden, zoals die worden geproduceerd bij het tot stand brengen of verbreken van aansluitingen terwijl de netspanning is ingeschakeld.
- Klikkende geluiden, zoals die optreden bij het vervangen van het element van een draaitafel terwijl de netspanning is ingeschakeld.
- 6) Klikkende geluiden, zoals die worden geproduceerd door bediening van de schakelaars van de versterker.
- Voortdurende hoogfrekwentie-oscillatie, of hoogtonige, elektronisch geproduceerde geluiden van muziekinstrumenten.
- 8) Rondzingend geluid bij gebruik van mikrofoons.

CONEXIÓN

- NO utilice ningún otro amplificador para operar este sistema de altavoces excepto CA-MXGA77.
- Desactive la alimentación de todo el sistema antes de conectar los altavoces al amplificador.
- La capacidad máxima de potencia del altavoz principal del SP-MXGA77 es de 55 W y la del altavoz de subgraves es de 100 W. Uná entrada excesiva resultará en ruido anormal y posibles daños. En casos donde las señales descritas más abajo se apliquen a los altavoces, aunque las mismas resulten menores que la entrada máxima permisible, pueden causar una sobrecarga y quemar el cableado de los altavoces. Asegúrese de disminuir el volumen del amplificador con anterioridad.
- 1) Ruido durante la sintonia en FM.
- 2) Señales de alto nivel que contengan componentes de alta frecuencia producidos por un magnetófono en el modo de avance rápido.
- Ruidos de conmutación provocados al encender y apagar otros componentes.
- Ruido de conmutación al conectar o desconectar cables con los componentes encendidos.
- 5) Ruido de conmutación cuando se reemplaza la cápsula con los componentes encendidos.
- 6) Ruido de conmutación provocados por la operación de los selectores del amplificador.
- 7) Continua oscilación de alta frecuencia o de sonidos de tonos altos provocados por instrumentos electrónicos.
- 8) Aullidos a utilizar micrófonos.

TECHNISCHE GEGEVENS

Type : 3-weg 3-luidsprekers bass reflex

Twin Hyper Power-Drive

Subwoofer

Luidsprekers:

Subwoofer : 13,5 cm kegeltype \times 1 Hoofdwoofer : 16,0 cm kegeltype \times 1 Tweeter : 5,0 cm kegeltype \times 1

Maximale vermogen:

Subwoofer : 100 W Hoofdluidspreker : 55 W

Impedantie:

Subwoofer : 6Ω Hoofdluidspreker : 4Ω

Frekwentiebereik:

Subwoofer : 32 Hz — 90 Hz Hoofdluidspreker : 90 Hz — 20 000 Hz

Geluidsdrukniveau:

Subwoofer : 86 dB/W⋅m Hoofdluidspreker : 75 dB/W⋅m

Afmetingen (B \times H \times D) : 290 mm \times 317 mm \times 336 mm

Gewicht : Elk 5,5 kg

Veranderingen in technische gegevens et ontwerp onder voorbehpoud.

ESPECIFICACIONES

Tipo : Reflex bajo con 3-altavoces

y 3 vias

Twin Hyper Power-Drive

Subwoofer

Altavoces:

 $\begin{array}{ll} \text{De subgraves} & : \text{Tipo c\'onico de } 13,5 \text{ cm} \times 1 \\ \text{Principal} & : \text{Tipo c\'onico de } 16,0 \text{ cm} \times 1 \\ \text{De agudos} & : \text{Tipo c\'onico de } 5,0 \text{ cm} \times 1 \\ \end{array}$

Capacidad de potencia:

De subgraves : 100 W Principal : 55 W

Impedancia:

 $\begin{array}{ll} \text{De subgraves} & : 6 \ \Omega \\ \text{Principal} & : 4 \ \Omega \\ \end{array}$

Gama de frecuencias:

De subgraves : 32 Hz — 90 Hz Principal : 90 Hz — 20 000 Hz

Nivel de presión acústica:

De subgraves : 86 dB/W·m Principal : 75 dB/W·m

Dimensiones (An \times Al \times Prf) : 290 mm \times 317 mm \times 336 mm

Peso : 5,5 kg cada uno

El diseño y las especificaciones están sujetos a cambio sin aviso.

COLLEGAMENTO

- NON usare un amplificatore diverso dal modello CA-MXGA77 per utilizzare questo sistema di altoparlanti.
- Spegnete la corrente dell'intero sistema prima di collegare gli altoparlanti all'amplificatore.
- La capacità di potenza massima dell'altoparlante principale del modello SP-MXGA77 è di 55 W e quella del subwoofer è di 100 W. Un ingresso eccessivo causerà un suono anormale è possibili danni. Nel caso in cui i segnali descriti qui sotto vengono applicati agli altoparlanti, possono causare un sovraccarico e bruciare il cablaggio degli altoparlanti, anche se i segnali siano al di sotto dell'ingresso massimo ammesso. Assicuratevi di diminuire il livello del volume dell'altoparlante prima di procedere.
- 1) Generazione di rumore durante la sintonizzazione FM.
- Segnali di alto livello che contengono dei componenti ad alta frequenza riprodotti da una piastra a cassette nel modo di avanzamento rapido.
- Si senitrà uno scatto quando accendete o spegnete la corrente degli altri compoenti.
- Si sentirà uno scatto quando collegate o scollegate i cavi con la corrente accesa.
- Si sentirà uno scatto quando viene sostituita la cartuccia con la corrente accesa.
- Si sentirà uno scatto quando vengono usati gli interruttori dell'amplificatore.
- Oscillazione continua ad alta frequenza o suoni acuti da strumenti musicali elettronici.
- 8) Ululato quando usate i microfoni.

ANSLUTNING

- Använd INTE någon annan förstärkare än CA-MXGA77 till att driva detta högtalarsystem med.
- Slå av strömmen i alla apparater i ljudanläggningen innan högtalarna ansluts till förstärkaren.
- Maximal effekthanteringskapacitet för SP-MXGA77 är 55 W för huvudhögtalare/100 W för lågbashîgtalare. Brus uppstår i ljudet och högtalarna kan skadas om de matas med för hög effekt. I situationerna som beskrivs nedan kan högtalarna också överbelastas och kabeltråden inne i hägtalarna brännas sönder, fastän högtalarnas effekt inte har överskridits. Sänk därför ljudstyrkan på förhand.
- 1) Brus under inställning av FM-radiostationer.
- 2) Starka, högfrekventa signaler från ett kassettdäck under snabbspolning framåt.
- 3) Ljudbangar som uppstår när andra apparater i anläggningen slås till och från.
- 4) Skrapljud som uppstår när anslutningskablar ansluts eller kopplas från medan strömmen är på.
- 5) Skrapljud som uppstår när pickupelementet på en skivspelare byts medan strömmen är på.
- 6) Ljudbangar som uppstår när du använder förstärkarens omkopplare.
- 7) Kontinuerliga, högfrekvenssvängningar eller högfrekvent ljud från elektroniska musikinstrument.
- 8) Akustisk återkoppling (tjutande ljud) vid bruk av mikrofoner.

SPECIFICAZIONI

Tipo : Reflex basso con 3-altoparlanti

e 3 vie

Twin Hyper Power-Drive

Subwoofer

Altoparlanti:

Subwoofer : Cono da 13,5 cm \times 1 Woofer principale : Cono da 16,0 cm \times 1 Tweeter : Cono da 5,0 cm \times 1

Capacità di potenza:

Subwoofer : 100 W Altoparlante principale : 55 W

Impedenza:

Subwoofer : 6Ω Altoparlante principale : 4Ω

Gamma di frequenza:

Subwoofer : 32 Hz - 90 HzAltoparlante principale : 90 Hz - 20 000 Hz

Livello di pressione sonora:

Subwoofer : 86 dB/W·m Altoparlante principale : 75 dB/W·m

Dimensioni (L \times A \times P) : 290 mm \times 317 mm \times 336 mm

Massa : 5,5 kg ciascuno

TEKNISKA DATA

Typ : 3-vägs, 3-elements

basreflexhögtalare

Twin Hyper Power-Drive

Subwoofer

Högtalarelement:

Lågbaselement: 13,5 cm kon \times 1Huvudbaselement: 16,0 cm kon \times 1Diskantelement: 5,0 cm kon \times 1

Effekthanteringskapacitet:

Lågbashögtalare : 100 W Huvudhögtalare : 55 W

Impedans:

Lågbashögtalare : 6Ω Huvudhögtalare : 4Ω

Frekvensomfång:

Lågbashögtalare : 32 Hz — 90 Hz Huvudhögtalare : 90 Hz — 20 000 Hz

Ljudtrycksnivå:

Lågbashögtalare : 86 dB/W⋅m Huvudhögtalare : 75 dB/W⋅m

Yttermått (B \times H \times D) : 290 mm \times 317 mm \times 336 mm

Vikt : 5,5 kg perst.

Il disegno e le specificazioni sono soggetti a cambiamenti senza preavviso.

Rätt till ändringar av utförande och specifikationer förbehålles utan föregående meddelande.

LIITÄNTÄ

- ÄLÄ käytä muuta vahvistinta tämän kaiutinjärjestelmän käyttöön paitsi mallille CA-MXGA77.
- Katkaise koko järjestelmän virta ennen kuin suoritat liitännät kaiuttimista vahvistimeen.
- Mallin SP-MXGA77 pääkaiuttimen enimmäisteho on 55 W, apubassokaiuttimen 100 W. Liiallinen antoteho aiheuttaa epänormaalia kohinaa ja jopa vahinkoa. Tapauksissa, missä kaiuttimet joutuvat alla kuvattujen signaalien kohteeksi, vaikka signaalit olisivat alle sallitun maksimi antotehon, ne saattavat aiheuttaa ylikuormitusta ja polttaa kaiuttimien johdot. Vähennä siis vahvistimen äänenvoimakkuutta jo ennalta.
 - 1) Kohinaa FM-virityksen aikana.
- Kasettidekistä eteenpäinkelauksen aikana muodostuneet vahvat, korkeataajuuksisia komponentteja sisältävät signaalit.
- 3) Klik-ääni, joka syntyy silloin kun toisten osien virta kytketään ja katkaistaan.
- 4) Klik-ääni, joka syntyy silloin kun kytketään tai irrotetaan johtoja virran ollessa päällä.
- 5) Klik-ääni, joka syntyy silloin kun vaihdetaan hylsy virran ollessa päällä.
- Klik-ääni, joka syntyy silloin kun käytetään vahvistimen kytkimiä.
- Jatkuva korkea värähtely tai elektronisesti tuotettu korkea soittimen ääni.
- 8) Ulinaa mikrofonia käytettäessä.

TILSLUTNING

- Anvend IKKE anden forstærker end CA-MXGA77 til drift af dette højttalersystem.
- Sluk for strømmen til hele systemet før højttalerne forbindes til forstærkeren.
- Den maksimale belastningskapacitet for SP-MXGA77
 hovedhøjttaleren er 55 W/for subwooferen 100 W. For kraftigt
 indgangssignal vil resultere i unormal stoj og muligvis
 beskadigelse. I tilfælde hvor højttalerne udsættes for
 signalerne beskrevet nedenfor, kan der forekomme
 overbelastning og overbrænding af ledningerne i höjttalerne
 selv om signalstyrken er under den maksimale tilladte værdi.
 Husk derfor at at sænke højttalerlydstyrken i forvejen.
 - 1) Støj under FM-afstemning.
- 2) Signaler med høje niveauer der indeholder höjfrekvente komponenter dannet af en båndoptager der er indstillet til hurtig fremspoling.
- 3) Klikstøj dannet når der tændes eller slukkes for strommen til andre domponenter.
- 4) Klikstøj der dannes når ledninger tilsluttes eller tages ud af forbindelse mens der er tændt for strømmen.
- 5) Klikstøj der dannes når pickuppen udskiftes mens der er tændt for strømmen.
- 6) Klikstøj der dannes når forstærkerens omskiftere betjenes.
- 7) Fortsat høj frekvenssvingning, eller en højlyd dannet af et elektronisk instrument.
- 8) Hyletoner når der anvendes en mikrofon.

TEKNISET TIEDOT

Tyyppi : 3-tie, 3 kaiuttimen bassorefleksi

Twin Hyper Power-Drive

Subwoofer

Kaiuttimet:

Apubasso : 13,5 cm karitomuotoinen \times 1 Pääbasso : 16,0 cm karitomuotoinen \times 1

Diskantti : 5,0 cm karitomuotoinen × 1

Enimmäisteho:

Apubasso : 100 W Pääkaiutin : 55 W

Impedanssi:

Apubasso: 6 Ω Pääkaiutin: 4 Ω

Taajuusala:

Apubasso : 32 Hz — 90 Hz Pääkaiutin : 90 Hz — 20 000 Hz

Äänenpainetaso:

Apubasso : 86 dB/W⋅m Pääkaiutin : 75 dB/W⋅m

Mitat (L \times K \times S) : 290 mm \times 317 mm \times 336 mm

Paino : 5,5 kg perst.

Oikeudet muutoksiin pidätetään.

SPECIFIKATIONER

Type : 3-vejs basrefleks-højttaler

med 3-elementer

Twin Hyper Power-Drive

Subwoofer

Høittalere:

Subwoofer: 13,5 cm membran \times 1Hoved-bashøjttaler: 16,0 cm membran \times 1Diskantenhed: 5,0 cm membran \times 1

Belastningskapacitet:

Subwoofwer : 100 W Hovedhøjttaler : 55 W

Impedans:

 $\begin{array}{lll} \text{Subwoofwer} & : 6 \ \Omega \\ \text{Hovedhøjttaler} & : 4 \ \Omega \end{array}$

Frekvensområde:

Subwoofwer : 32 Hz — 90 Hz Hovedhøjttaler : 90 Hz — 20 000 Hz

Lydtryksniveau:

Subwoofwer : 86 dB/W·m Hovedhøjttaler : 75 dB/W·m

Mål (B \times H \times D) : 290 mm \times 317 mm \times 336 mm

Vægt : 5,5 kg hver

Design og specifikationer kan blive ændret uden varsel.





